



Chicago & North Western Historical Society **MODELER**

Volume 12, Number 2

October 2020



Don Vaughn on CGW colors



Dash 8 Beacons



Rivarossi Coach Upgrade

...and more

Bill of Lading

October, 2020

Masthead

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An Invitation to join the CNW Historical Society

The CNWHS is an independent non-profit educational corporation. The Society's purpose is to foster interest, research, preservation, and the distribution of information concerning the C&NW and related roads. Its membership is spread throughout the United States and numerous foreign countries, and its scope includes all facets of the CNW. Currently the Society has close to 3000 registered members. Members regularly receive a variety of information including a quarterly publication: NWL.

North Western Lines (NWL) is dedicated to the publication of articles and news items of historical significance. Other Society publications include monographs, calendars, equipment rosters, and reprints of original CNW source material. This publication makes otherwise unobtainable data available to the membership at reasonable cost. Membership in the Society is a vote of support and makes all of the Society's work possible. It provides those interested in the CNW with a legitimate, respected voice in the railroad and historical communities. By working together, individuals interested in CNW are able to accomplish much more than by individual efforts. No matter how diverse your interests or how arcane your specialty, others share your fascination with CNW and affiliated railroads.

The Archives Committee of the C&NWHHS is very active and maintains a large collection of the C&NW and related roads. For more information see the CNWHS web site.

Merchandise related to the C&NW, as well as back issues of NWL, Car kits and structure kits for modeling are offered through the CNWHS web site.

Chicago and North Western Historical Society Modeler is a publication of the CNW Historical Society (CNWHS) for the purpose of disseminating CNW modeling information.

An Illinois not-for-profit Corporation dedicated to preserving the legacy of the C&NW and its predecessor & successor roads since 1973.

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Apologies if I have inadvertently omitted anyone. Any person left out is entirely the fault of the editor.

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THE PLAY'S THE THING

by Michael Mornard

Here we go with another issue, as I sit here and wonder how it's already almost Halloween.

I'm trying out a couple of new ideas in an article this issue. The first is the title; "Modeling from the Archives." A lot of modelers use the CNWHS Archives to gather information, but in this article, and, I hope future ones, I am taking a different tack. Rather than starting with a project, I'm starting with material from our Archives, and seeing what use we can make of it in our modeling. This issue, I will discuss the 1974 "Train Operation Manual" that our Archives sells as a reproduction.

Which brings me to my next idea – "Operation is Modeling Too." I want to promote operations among the modelers in our Society, and to help show that by paying attention to the prototype, our operations will be enhanced. Lately in the OpSig there has been some use of the term "Play Value" to talk about adding variety and interest to operations, and I'm all in favor of that. This is a hobby, and hobbies should be fun. The article on the Train Operation Manual will be one example of how we can do this. Trains, after all, don't sit still; to paraphrase the Bard, "All the world's a stage, and all the cars and engines merely players; they have their exits and their entrances, and one consist in its time plays many parts." We shall see, going forward, how this works out.

Next – what do you want? People have been very supportive of the magazine, but I'm interested in knowing specifically what people would like to see. Do you want cars, engines, buildings, track plans, or what? Do you want very detailed articles, or broad overviews, or both? Does a photo gallery of our members' model work, similar to "Model Railroader" magazine's "Trackside Photos," appeal to you? Please feel free to let me know what sort of content you would like North Western Lines Modeler to include.

And, of course, once again I would like to see what our members are doing. Articles, photos, ideas, whatever you have, please feel free to submit; we have resources available to help you turn your thoughts into the article you want. This magazine can't thrive without input from CNWHS modelers. Don't be shy, let the world see what you've been up to.

Please submit all materials in Microsoft Word, .doc or docx format, to michael.mornard@pobox.com

Michael Mornard

Q&A TIME

Much like the "Answer Man column in our sister publication "North Western Lines," I would like to see "North Western Lines Modeler" offer a place to exchange questions and answers. We got this question from Bob Gulbrandsen, who asks

"I model the CNW in HO scale. I am currently building an 85' Pullman Palace observation coach. Can you please advise me as to paint schemes used by the CNW on this type of car? I have not found anything available to show me what they used. Did they ever use the CNW yellow and green, or was it mostly Pullman green?"

If anybody can help Bob out, contact us and we'll publish the information.

C&NW C40-8 ROOFTOP BEACONS

by Dave Nelson

Dave Nelson was kind enough to share these photos of rooftop beacon placement on the Dash Eights with us. He received a request from a modeler, and after gathering the photos decided to send them along. He said, "I do not have photos of the entire series of C40-8s (that is what the North Western preferred to call them) so the strobes may not be this way on every example of the class 8501-8530. I took all these shots at Butler Yard near Milwaukee in 1992-93 and I show the entire shot then a cropped version focusing on the strobe."

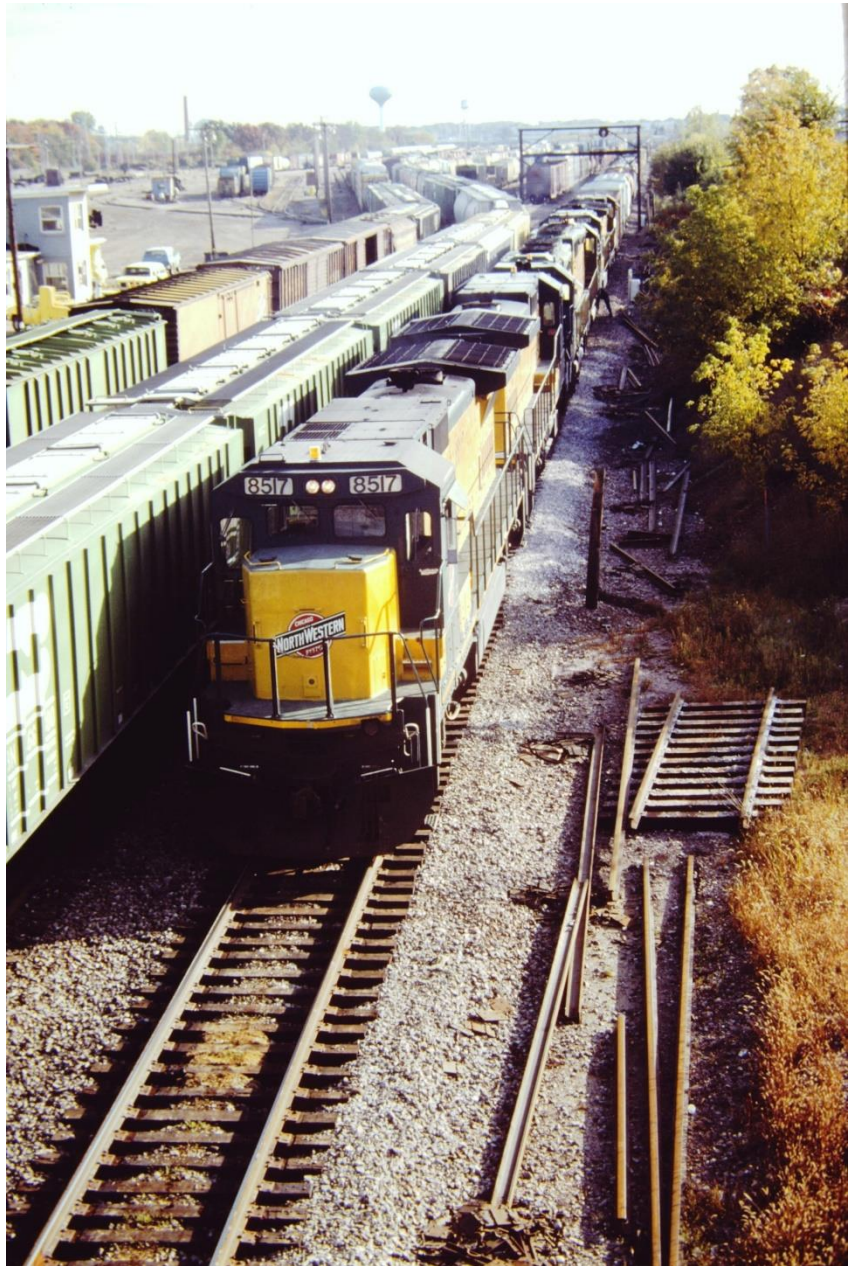
Notice that at least on the examples here, the beacon is consistently located just to the right of the right headlight, and at the front of the roof.

Our thanks to Dave for the photos, to Ron Christensen for directing him to us, and to the modeler whose questions started this all. We hope these photos will be of use. (As a bonus, check out the weathering on some of the other equipment too!)

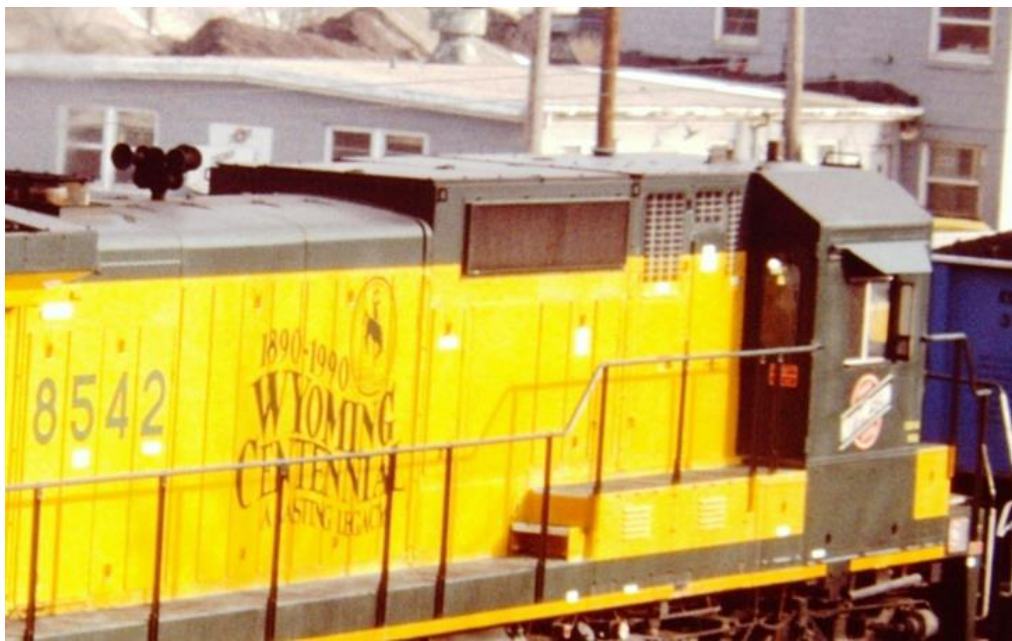
Remember, these are electronic pictures, so you can make them bigger if you want.











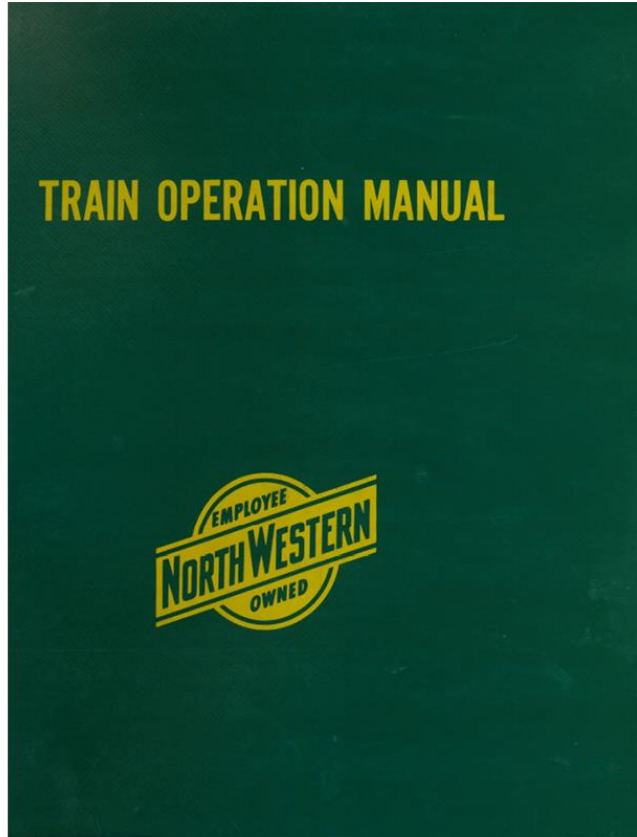
MODELING FROM THE ARCHIVES

by Michael Mornard

The 1974 Train Operations Manual

(Editor's Note. This column was originally going to be about "Track Types." Due to a snag in gathering materials, that will appear at a later date.)

For this first installation of "Modeling from the Archives," we're going to look at a document that can greatly enhance operations on your layout.



(picture from C&NWS Store page at <https://cnwhs.org/wp1/product/cnw-1974-train-operation-manual/>)

There are a number of sections in this book that will be of great interest to modelers that want to operate more prototypically. It covers, as it says in the "Instructions" page, "all C&NW road freight trains except those trains primarily doing local work."

The table of contents alone is valuable, providing a list of freight trains by train number, including their originating and ending terminals. The train schedules follow, and then the blocking guide, which shows, for each yard, what blocks they are to make up, and which trains they go on. The last section gives on-time standards, divided into green, yellow, and red.

Below are the pages for Train 701, Minneapolis to Marshalltown, and 702, Marshalltown to Minneapolis.

MINNEAPOLIS TO MARSHALLTOWNNo. 701 - Daily

| <u>Station</u> | <u>Arrive</u> | <u>Depart</u> | <u>Handling</u> |
|----------------|---------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Cedar Lake | | 6:30 AM | Block train as follows: 1. Merriam 2. Montgomery 3. Waseca 4. Albert Lea 5. Mason City 6. Marshalltown Connects from No. 462. |
| Merriam | 8:30 AM | 9:30 AM | Set out block 1. Pick up Albert Lea, Waseca and Montgomery blocks. |
| New Prague | 10:30 AM | 11:00 AM | Set out block 2. Pick up Waseca and Albert Lea blocks. |
| Waseca | 12:45 PM | 2:15 PM | Set out block 3. Pick up Albert Lea block. |
| Albert Lea | 4:00 PM | 8:30 PM | Crew change. Block train as follows: 1. Mason City 2. Marshalltown |
| Mason City | 10:00 PM | 12:01 AM | Set out block 1. Fill block 2. Connects to No. 187. |
| Marshalltown | 5:00 AM | | Connects to Nos. 262, 144, 254, 258, 384, 392 and 385. |

22' 30"

MARSHALLTOWN TO MINNEAPOLISNo. 702 - Daily

| <u>Station</u> | <u>Arrive</u> | <u>Depart</u> | <u>Handling</u> |
|----------------|---------------|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| Marshalltown | | 4:00 PM | Block train as follows: 1. Mason City 2. Albert Lea 3. Minneapolis Connects from Nos. 253, 391, 166, 384 and 395. |
| Eldora | 5:15 PM | 5:45 PM | Pick up. |
| Mason City | 8:30 PM | 9:30 PM | Set out block 1. Pick up Minneapolis, Merriam, Waseca, and Albert Lea blocks. Connects to No. 725. Connects from No. 186. |
| Albert Lea | 11:00 PM | 2:30 AM | Crew change. Block train as follows: 1. Hopkins 2. Waseca 3. Montgomery 4. Merriam 5. Minneapolis |
| Waseca | 4:00 AM | 5:15 AM | Set out and pick up. |
| Montgomery | 6:15 AM | 6:45 AM | Set out and pick up. |
| Merriam | 8:00 AM | 8:45 AM | Set out and pick up |
| Hopkins | 9:45 AM | 10:00 AM | Set out block 1. |
| Cedar Lake | 10:45 AM | | |

18'45"

There is a lot of information on these schedules. What is really interesting is, if you look closely, the trains are not exact mirror images of each other, though. 702 stops at Eldora, between Marshalltown and Mason City, but 701 does not. 701 stops at New Prague, but 702 does not. There are several other examples in these schedules of towns that are worked only by one train.

The blocking information also adds a great deal to operations. Even if you are only modeling a small section – say, Marshalltown to Mason City -- you can still incorporate the blocking instructions beyond Mason City to simulate the train running to its destination.

The next section is blocking lists for each station. As an example, here is a part of page 130, showing the blocking list for Mason City.

| <u>MASON CITY</u> | |
|--------------------------------------------------------------------------------------------------------------------------|------------------------|
| <u>Block</u> | <u>Train</u> |
| Albert Lea | 702 |
| Des Moines | 726 |
| Eagle Grove | 187 |
| Fort Dodge | 187 |
| Hampton | Wayfreight |
| Lake Mills | Wayfreight |
| Marshalltown | 701 |
| Merriam | 702 |
| Minneapolis | 702 |
| St. James | 725 |
| Tracy | 725 |
| Waseca | 702 |
| Worthington | 725 |
| Shorts in station order | 187 |
| District shorts in station order | 725 |
| <u>Special Instructions</u> | |
| <u>Station</u> | <u>Block</u> |
| Des Moines, Ia. (See Appendix) | |
| Bell Avenue | Des Moines-Kansas City |
| Hull Avenue | Eagle Grove |
| Perishable Commodities - all perishable will be kept together and move in a Marshalltown Perishable block on No. 701. | |

(130)

Once again, notice the wealth of information we have. Seven different trains are listed (assuming “Wayfreight” refers to one train), and some of them get multiple blocks. In addition, there are special instructions for Perishable freight, and the “Des Moines” block gets additional work done, with reference to the Appendix. This appendix lists the industries where the cars should be blocked to Bell Avenue, and the note “all others blocked to Hull Avenue.”

This is just a brief overview of the Train Operations Manual, but it shows us the information it contains and how we can use this information in our operations. If you are running Mason City Yard and you block your cars following the above instructions, then yes, you are indeed doing “Prototype Modeling.”

Chicago Great Western Diesel Colors

by Don Vaughn

(Editor's Note. The late Don Vaughn needs no introduction to North Western Lines Modeler readers. Before Don's passing, he was corresponding with Ron Christensen on the colors of red used on CGW diesels. Ron has generously allowed us to share Don's notes and photographs with our readers. It is with deep gratitude that North Western Lines Modeler presents this information.)

Just thought, attached a few photos for the Modeler. Floquil paint made a great match for CGW maroon, R64. I painted a lot of models and then put Crystal Coat finish on them. I was fortunate to have some CGW items available to compare to. Yes, they were faded, but my dad confirmed the colors were accurate. (WAV was General Agent for CGW). Now, while the maroon is in question, I used Testors Signal Red for my post 1964 era models. That is spot on once the Crystal Coat was applied!



I have models of my dad's he did with 1954 maroon from Oelwein paint shops - the real thing. That is what I sent to TruColor that is their TCP-132 CGW/Soo Maroon. Now, the boxcar 392 and NW2 19 has one shade of Floquil R64, with Crystal Coat finish while the 53 is just in R64. I found that even Floquil paint was not consistent - note the flat finish on the 53.





The shot of the SD40 and F; SD in Testors Red, F in R64 - neither got the Crystal Coat treatment since I wanted them to appear as they would when painted. I liked my models to appear accurate although I never weathered them. Hope this helps.

(Yes, Don, it does help. Thank you for this final article, and thanks again to Ron for his generosity.)



One Thing Leads to Another...

by Dave Casey

I'm sure we all have started a project that went far beyond what we originally anticipated whether it is fixing that small drip in the faucet with a new washer and ending up with a whole new "updated" faucet system, to painting one room only to see that it makes all the others look bad – hence paint them all.

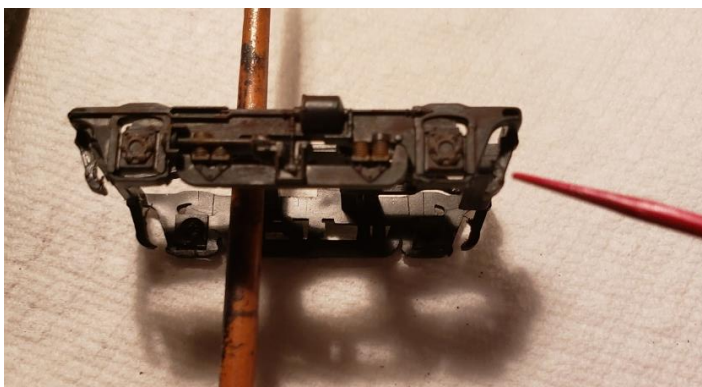
Well, that is exactly what transpired with my latest train show "find" (a steal at \$15) as I decided to just check out those wheelsets in the passenger car trucks to ensure they meet NMRA Standards before letting it car loose on the layout.



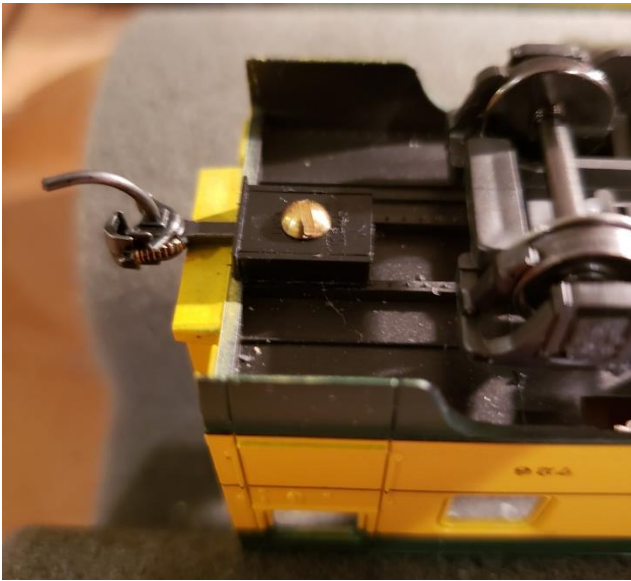
Lo and behold, those wheels ended up too tight to fit the standard gauge– a rare result these days – so I tried to twist the wheels to fit, but to no avail. In the past, I found that wheelsets like the old Athearn "blue box" can easily be pried to fit, but these wouldn't budge. Even though they were metal out of the box, which is my standard for the layout, they would need to be replaced by my go to favorite wheelsets from InterMountain. The trucks were mounted to the car using the old pressure fit pin method, so I pulled them out in order to check the wheel size. I thought they might be 36" wheels for this car, but the trucks were

designed for 33" as I found out. So, I pulled out four new wheelsets and installed them in my handy (InterMountain) paint tool. Prior to painting, I gave the parts a wash using 70% rubbing alcohol (some use the soap & water dry overnight method). Since I was only painting wheels for one car, I passed on the airbrush and painted the wheels grimy black (FloQuil F1100013) by hand using a medium size Microbrush™. Before the paint totally dried, I used this opportunity to add a variety of rust powders to give the wheels a weathered look.

While the wheels were drying, I took the opportunity to hand paint the trucks grimy black also weathering them with powders as they dried. To hold the trucks while I worked, I used the handles from old brushes that had deceased (part of the C&NW's "Cheap and Nothing Wasted" slogan).



After the trucks and wheels were dry, I proceeded to install them back to the car body. Since they came with talgo mounted couplers (horn-hook, believe it or not). My initial idea was to replace these long snap-in style couplers with McHenry (MCH52) snap-ins. I did some quick tests using the McHenry couplers on my coupler check track, only to be unhappy in how they sagged (plus they were plastic, which I try to avoid), so I decided to skip the talgo mounts and install body mounted couplers instead. This involved adding a couple shims using doubled faced tape with new Kadee #146 boxes until I found the combination that resulted in the couplers matching the height gauge. With the couplers the correct height, I then drilled #2-56 holes for the brass screws that would hold the boxes to the car body.



Once installed, I carefully (avoiding the brass springs) brushed the couplers with some grimy black, and, like the wheels, added some rust powders to the outside. For the inside of the couplers, I painted a with Testors enamel steel (#1108) to show they were in use.



Being satisfied with the coupler conversion, I turned my attention back to the trucks. I've never been a big fan of the pressure pin truck attachments, so I decided to convert them to screw mounts instead. This process entailed first snipping the pins off the truck and drilling out the center for new brass mounting machine screws (#2-56 x 1/4). I used the flush mounting screws to ensure that they seated firmly into the truck.



Next, I went to my styrene stash for a short piece of solid rod (Evergreen) that would serve as a plug for the existing truck mounting holes that I drilled open. Once I found a snug fit, I applied a small amount of plastic welding cement (Plastruct) to each of the two rods, installed them and let them cure thoroughly (overnight). Then, I just needed to cut the two rods off level with the area where the trucks would mount to the body. I left an ample amount (approx. 1/2") of the rod on the flip side which would protrude into the interior of the coach, but not interfere with the seating.

Then, after carefully marking the centers in the rods, I drilled and tapped holes (#2-56) in the rods where the trucks would

be mounted. After test fitting the screws, I installed the trucks checking to be sure they were flat against the body and swiveled freely.



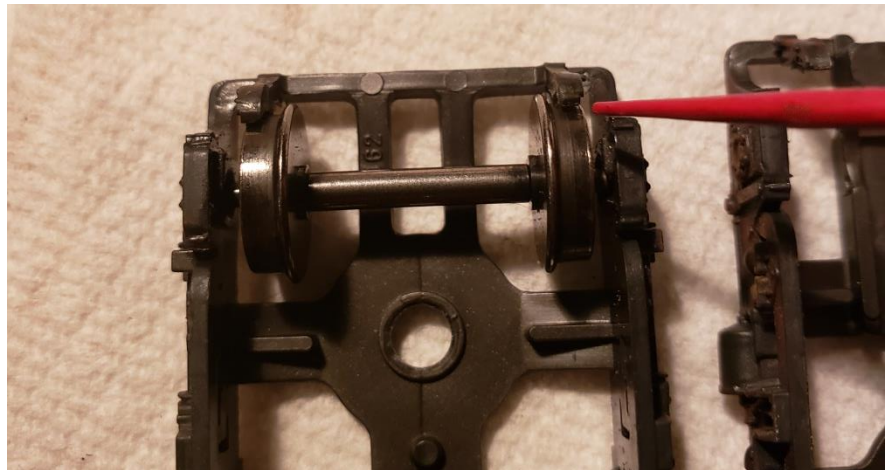
My next test would be how well the converted trucks performed on the track.

Rats! For some reason, the car did not glide freely as it was supposed to on my track, so I did an inspection of each wheelset/truck. The wheels did not move well on either truck, but I could not locate the problem, so I first tried using the truck socket tool (REBOX T-100) to ensure the wheels were not hanging up at the axle ends. That didn't solve it, though, so I went to plan B which, in this case, was a small drop of lube (LaBelles #108), in each area where the axles would spin. But DRAT, that didn't improve the performance either.

After a few choice words about how this small project was blossoming into a large one, I double checked the wheel spin and finally realized it was the brake shoes on the trucks that were dragging on the new wheels at each end for some reason. That meant I needed to shave off the inside of each brake shoe using a motor tool and file. After accomplishing this task, I tested the wheel spin once again and found that was the answer. Hallelujah!

So, that was the end of my project car – right? WRONG!

My next item was to check the car weight with reference to the NMRA standard, and, lo and behold, this car was a whooping 3.30 ounces under the standard weight (6.90) for the 82' coach. That meant some serious



attention which started with carefully pulling the roof and windows out of the car body. Once accomplished, I realized that this would be a good time to paint the roof a more prototypical flat black than the stock gray color. After masking the windows with painters tape, I went to the paint booth and sprayed the roof with several light coats of Krylon flat black #249846. Setting this aside to thoroughly dry (a couple days), I went back to the subject at hand – weight, or lack of it. After a quick inspection of the underside of the car, I decided that I did not want to try adding weight since there was some underside detail (though minimal).

That led me to the only other option which was inside the coach that already had the



seating installed. But the seating was held in by a couple plastic pegs at each end that were heated on top to hold the unit intact.



Realizing that my options to add that much weight to the car were quite limited, I went ahead and scraped the ends of the pegs enough to be able to withdraw the entire interior. I was a little lucky in that there was just enough space between the interior floor and the car body to install a 1.3 ounce steel weight (like those from the Athearn Blue Box kits). After gluing a weight from my extras stash using Walters Goo in the center of the car, I looked for other likely spots for the additional weight required. Since nothing appeared workable, I reinstalled the interior back in the car and sought out other locations. Since I'm aware that the best area to add weight is close to the truck mountings, I decided to add four of the half ounce steel weights (A-Line #13004) at each end after painting them flat black so they would not be too obvious. As you can see in pictures coming up, they are not entirely out of view, but act as interior partitions. I again went to the Walther's Goo to ensure that the weights would stay in place even though they

did have the double-sided tape.



At this point, you're probably thinking I should just fit that roof back and get her in service. Well, not quite yet!

While the roof with windows was out of the car, I thought it would be nice to make the windows more prototypical with the addition of green film like I have on many of my other "400" train cars. My source for the film from years back was out of stock, so I resorted to the internet (not my favorite shopping method) for a solution. Lo and behold, we (Barb & I) came across this window film maker called Decorative Films™ and they just happened to have sample packs available whereby I could select any film in 5"x7" as sample for .45 each (not including S&H). So, of course I chose about five of the colors closest to the green I thought would work on the coach windows and ordered them on-line. When I received them a week later, it turned out the hue I had thought would be best was not, but one of the other samples (Lime-tree Green) matched perfectly.

Next was the installation of the film. Having worked with graphics in my professional career, this was not totally new to me. I skipped a couple recommendations for installation since I was only applying small strips to each window. If you have no experience with this, you may want to go with the instructions provided.

Once the film was installed to the interior side of the windows, I thought it would be nice to have interior lighting to appreciate the work. I just happened to have a couple extra Rapido™ light bars (#102013) that would fit nicely in the space available. These are magnetic (reed) light bars which do

not draw current from the track and can be turned on and off using a magnetic wand. Granted the batteries do not last forever, but I have used them previously and like the concept. I simply doubled face taped the bars to the underside of the roof and they were ready to illuminate the coach interior.



Having installed lighting in the coach, you can guess what that led to next in this project. Yep – got to have passengers if you are lighting the interior. Checking into my “stash” of figures that might work for this car, I came across some that were minus legs (Walthers SceneMaster™) in order to fit in the seats more easily. These I placed (after lightly sanding their posteriors for better adhesion) in the seats that had window posts to hide the absence of legs. For the remaining passengers, I went with some Preiser seated figures in random locations. For adhesive, I used Aleenes Quick Dry Tacky Glue™. I’ve found this adhesive gives me just the right amount of time (approx.. 1-2 mins.) to set the figure and does not require waiting 15 minutes for the glue to turn clear as others do. Also, this glue is readily available at most craft stores if a trip to the hobby shop is not convenient.

Since that pretty much completed the interior work, I slid the roof/windows back in place and checked that the lights were working properly. Voila – they worked! That means I was all done with this project...right? Wrong. Each end of the coach had diaphragms molded on the car in the yellow color. Not satisfied with this look, I checked my stash of diaphragms to see if I had a pair that would both fit and look prototypical. My first selection was a pair of IHC listed for the 1930's.



Since I knew Rivarossi was somehow associated with IHC, I thought this would be the obvious solution. With molded on diaphragms, though, that meant I needed to trim away a good share of those or (as per the IHC instructions) trim the backside of the replacements (see pics). After very carefully trimming the item, I test fit it on the new diaphragm and was disappointed with the end result. Unless I also trimmed the molded diaphragm off the car, it was just not compatible. So, back to the drawing board (or work desk, in this case).

My solution here was to skip the IHC diaphragm and look at other alternatives. I had a number of other parts to select from, but they either seemed clunky (a technical term), or not at all prototypical it turns out. I decided to just paint the stock diaphragm flat black plus the door and leaf spring above the door steel (Testors #1108). This seemed acceptable in itself, but I also decided to steal a couple diaphragm end plates from another kit (American Limited #9813) to complete the ends of the car.

The last minor addition was to paint the lights silver & red at each end (see above pics). This, for the time being, was going to be good enuf – as they say. So, the last two pictures show the completed car – one with lights on.



The only addendum is that I may want to, in the future, scrape off the molded on handrails and steps replacing them with metal ones, but that will have to wait for another time.

I hope you have enjoyed my extended journey of reworking a passenger car. If you have questions, suggestions – even criticisms, please feel free to join my Facebook group C&NWCenWIDivRR or emailing me at teamkarma@centurytel.net



Coming in Volume 12, Number 3 (January 2021)

Modeling the First-Generation Piggybacks

Modeling from the Archives

More