



Western Pacific Railroad Maintenance-of-Way Cars



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Presenting & Preserving the
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Pacific Railroad.



WP 2022 CONVENTION RENO NEVADA
Kerry Cochran

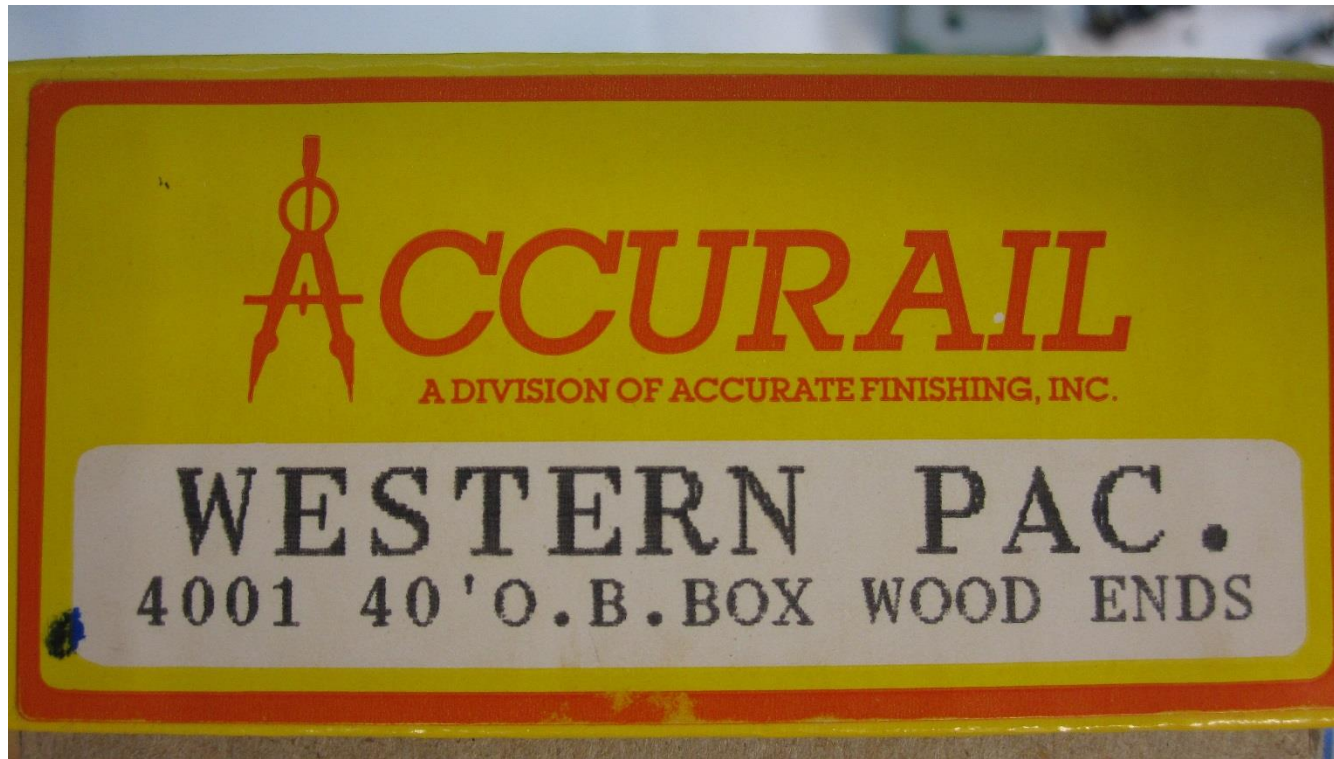
Modeling a Maintenance-of-Way Divided Bunk Car Type J

Photos by the author, unless otherwise noted

- **Maintenance-of-Way Cars**
- These are railroad cars that have outlived their revenue service days and are reused by the railroads to keep cost down. These cars in many cases are older rolling stock that have been set-aside or replaced by newer equipment.
- Older freight cars are easily adapted to the MOW fleet, especially if it's continuing in a similar job like an older tank car to move water or fuel, former coal car turned into a ballast car. Most all of this equipment in most cases are painted into a special color to differentiate the cars from revenue service and are renumbered.

- Models of the Western Pacific Railroad have been produced by various manufacturers over the years, however there have not been very many maintenance-of-way models manufactured and the models that you may be able to find are in other railroad names or do not fit the Western Pacific.
- I started modeling maintenance-of-way equipment a number of years ago, only to find that most were just a manufacturer's standard box car or flat car painted gray and re-lettered for generic MOW service.
- While I am not a Master Model Railroader, I have been modeling for a number of years. This is my first attempt to create a prototype model.

- I started to research Western Pacific maintenance-of-way equipment for a presentation that I was giving at the Feather River Rail Society's annual WPRR Historic Conventions in Salt Lake City in April of 2018 and then for the 2019 convention in Sacramento. (2020 and 2021 conventions cancelled due to COVID virus)
- All this led me to modeling a group of WP MOW cars.
- This is the third in a series of cars that I will be modeling over time and I hope to be able to share more of my modeling equipment as I get them completed.
- When I started this project, the cart was in front of the horse, I should have done more research prior to starting the project, as I found more information when I was in the middle of producing this car.



I selected the Accurail # 4001 40 foot Outside Braced box car as a starting point, as it appealed to me and looked like a good candidate for a Kit-Bashed – Scratch building project.

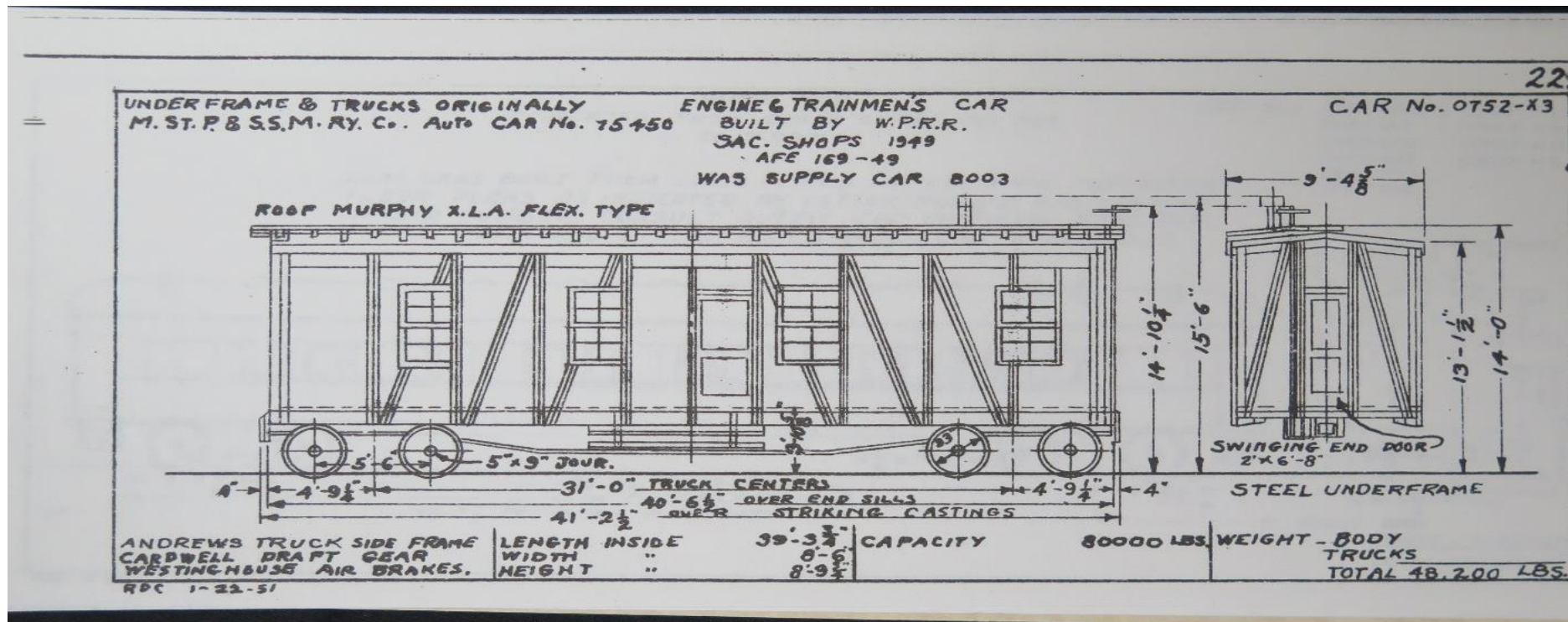
Plus, I had a few of these cars kits on hand since Accurail has retired this series of cars and the only way to find them is on eBay. There are other Accurail cars that will also work that are in current production.

The original WP car was built by the Sacramento shops in 1949.

I found a drawing of the car in a reproduction of the *Maintenance of Way Equipment, Western Pacific Railroad Co.* drawing book that was originally produced by the WP Office of the Chief Mechanical Officer, Sacramento, Calif. (Ten new WP reprinted equipment books available at the museum and in the museum store)

Page 225 gave the overall measurements of the car and how it was envisioned to look by the engineers that designed it.

While the Accurail car is not an exact prototype, it's a good stand in and works great for this project.



Maintenance of Way Equipment, Western Pacific Railroad Co. Page 225

Well sort of, I used a photo of the car that I was going to model from a set of photos from Peter Arnold's Maintenance of Way photo collection.



- I used this photo from Peter Arnold's collection for the basis of the model.



The basic body of the box car



Starting on cutting out the doors

The Accurail door is very thick and it took some time to carefully get the door cut in just the right manner so that I could use the original door frame.



Starting to cut out the windows

The windows were a bit easier to cut out, it just took some time to get the new window frames lined up according to the photos that I had



Getting them all cut out

Getting all the window frames cut out and installed (notice this is just one side in this photo)

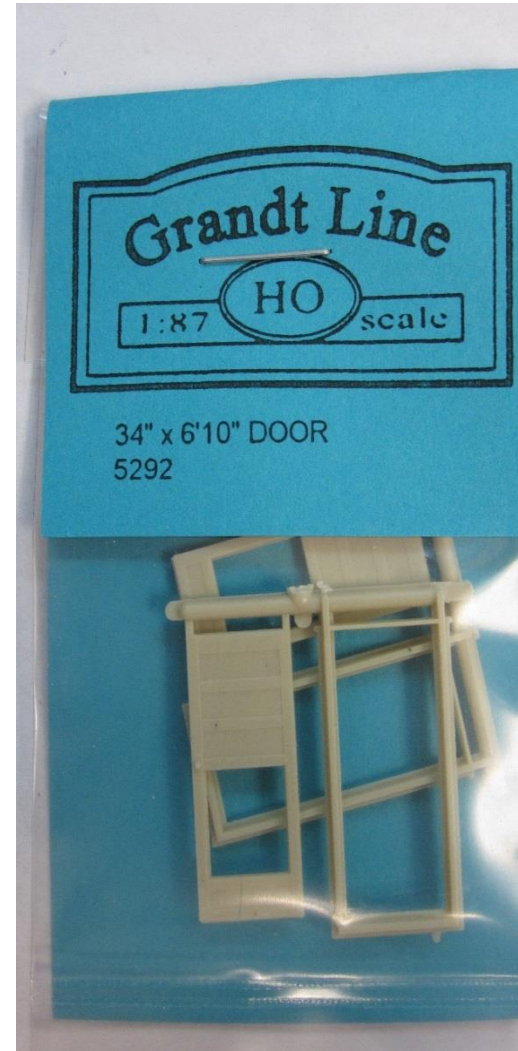


Moving on to installing the window frames and the doors

Using some strip styrene and doors from Grandt Line products, the door openings were changed to make the two doors for the car.

After the window frames were installed, the window panes were installed. (Later, I used Testors Clear Parts Cement and Window Maker for the windows.)

Grandt Line Outfit Car Window # 5059 and 34 X 6' 10" Door # 5292



(In July 2018 Grandt Line products was sold to San Juan Model Co. After 60 years, Cliff Grandt decided to retire, so you should be able to get these parts under the San Juan Model Co. product line.)

Creating the brake end detail, I used the original brake staff bracket, and installing the brake staff.

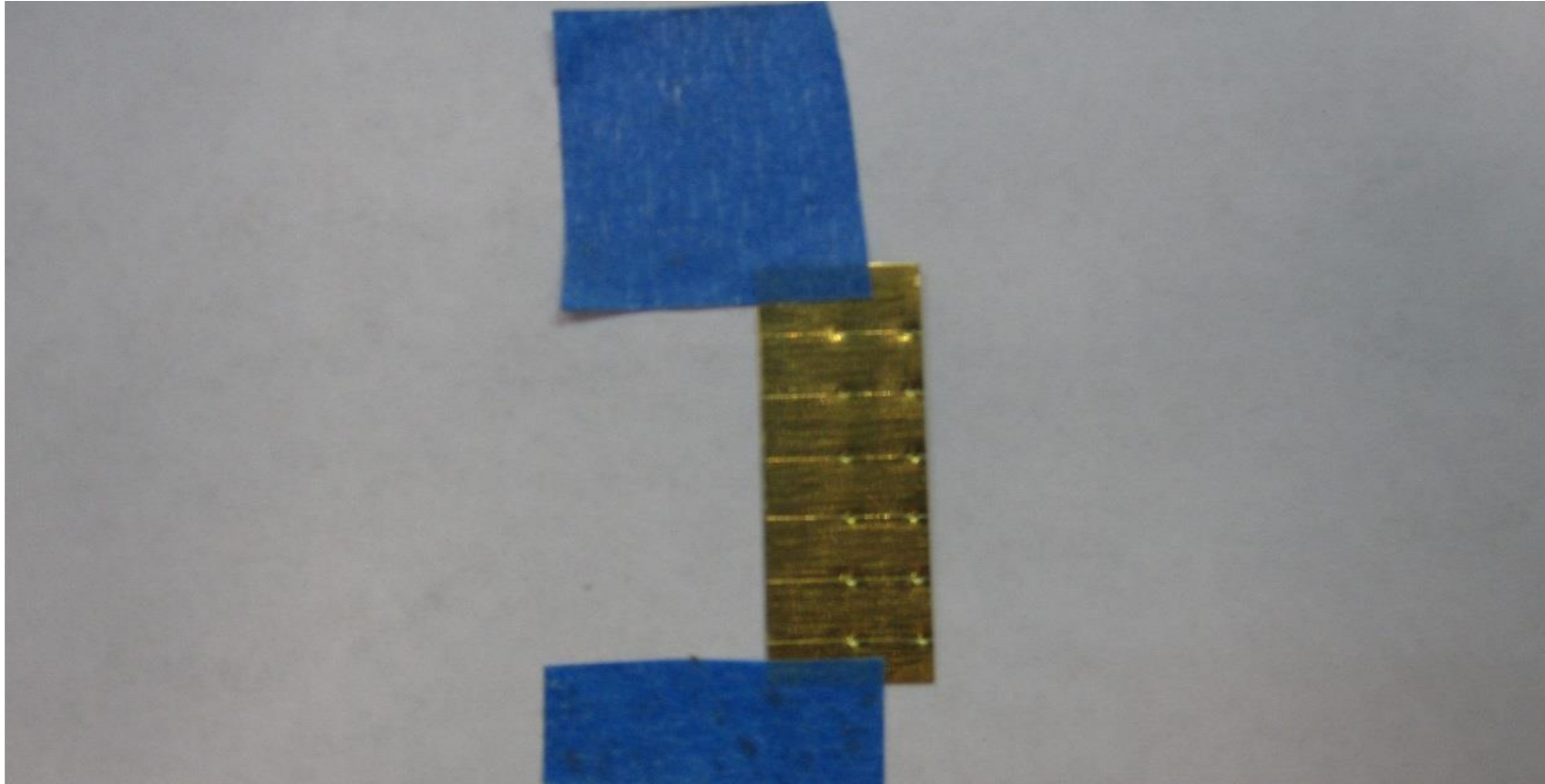
Also adding the smoke stacks to the roof, trying to match the location in the photos





Adding the grab irons, this was my most challenging part, as I have only added new grab irons on one other car.

Learning from my first WP mow flat car's experience adding grab irons, I made a brass template and used it to space out the grab irons and get them lined up so they look straight



The grab irons are Tichy # 3021 18" straight type, these grab irons were installed along the side of the car at the ends along with new Tichy # 3028 Roof Corner grab irons.

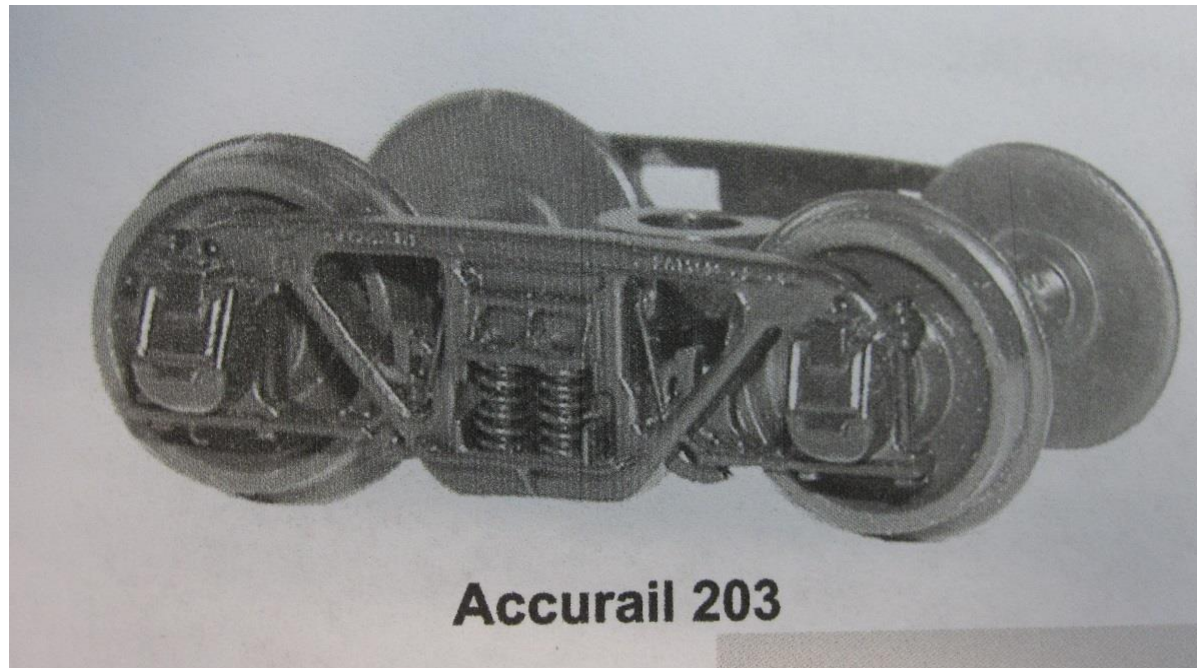
With the grab irons on, the first coat of paint was applied. Using a flat gray primer for the first coat, and then using Tamiya XF-34 Camel Yellow for the finish coat.



Moving to the underframe, I used Kadee # 58 scale couplers and Kadee # 520 33" freight metal wheels sets, changing the kit supplied Bettendorf trucks to the Andrew trucks.

I found a very good article on Freight Car Trucks by Richard Hendricks April 1, 2014. You can find this updated article at:

https://docs.google.com/file/d/0Bz_ctrHrDz4wcjJWcENpaDJYbUU/edit



Prior to weathering the car, the decals were applied using several different Micro Scale Decals sets. The sets used were:

- 87-212 WP Caboose black data blocks
- 87-491 WP 40' Wood Reefer black letters
- 87-254 UP Maintenance of Way black letters and signs
- 87-1012 Maintenance of Way equipment gothic letters, number and signs
- 90022 gothic black letters and numbers

Adding weight to the car was done by adding weights on the inside of the car.

Weathering the entire car was done with Bragdon Enterprises weathering powders.

Installing the trucks and wheel sets.



Here is a photo of the finished car at the BAPM (Bay Area Prototype Modelers) meet in June 2018. Photo courtesy of Harry Wong, Railroad Model Craftsman.



CREDITS

- FRRS Archives
- Harry Wong (RMC)
- Peter Arnold
- Thom Anderson
- Frank Brehm
- Mike Mucklin
- Jack Palmer

Questions and Answers

- I'll do my best to answer questions on this project.
- Next year, more WPRR Maintenance-of-Way Cars

Revision History

- 2021-12-23 Kerry Cochran – released for convention.
- 2022-05-21 Paul Finnegan – added Kerry Cochran on title slide.