

## TTX 60' flat cars

### The prototypes

TTX is best known for its fleets of intermodal and auto rack cars. The company started building a fleet of 60' flat cars in 1964. They purchased over a thousand in '64 and again in '65. By 1975 they had almost 6,000. In 1996 there were still over 5,000 in service. The cars were equipped and initialled for different uses. Hauling farm equipment, OTTX, was the most common use, accounting for about  $\frac{1}{3}$  of the fleet. Heavy equipment (bulldozers, tanks, etc.), HTTX, accounted for about  $\frac{1}{6}$  of the fleet. Other uses were bulkhead flats, general service, logs, car & truck frames, and containers. Cars were built by Pullman Standard, Thrall, and ACF.

This kit builds into a model of the OTTX or HTTX cars, which were essentially the same. The main difference being the number and type of tie-downs. The cars have wooden decks with 4 steel channels running the length of the car, in which a number of winches and chains are used to secure loads.

The September, 1997 issue of Railroad Model Craftsman has an excellent article on these cars.

### The Kit

This kit is a collaborative effort. Jim Kindraka had the inspiration and did the prototype research. Scott MacKenzie did the CAD work to get the frame 3-D printed. First Jim, and then I did some modifications of the printed frame, and I am casting it in resin. Jim built the first models and worked on the decals and instructions. I am putting the parts together in a box.

Jim's interest in this car is driven by his belief that the future of S scale lies in modern prototypes, those that are seen on the rails today. To make sure this kit happened, Jim paid for the first mold. So the first 20 or so kits will cost \$10 less than subsequent kits. Thank you, Jim. P.S., The first mold gave out after 28 castings, and this first run sold out in 10 days. I want to thank the buyers for their support. The price for kits will now be \$65 with free shipping.

# TTX FLATCAR INSTRUCTIONS

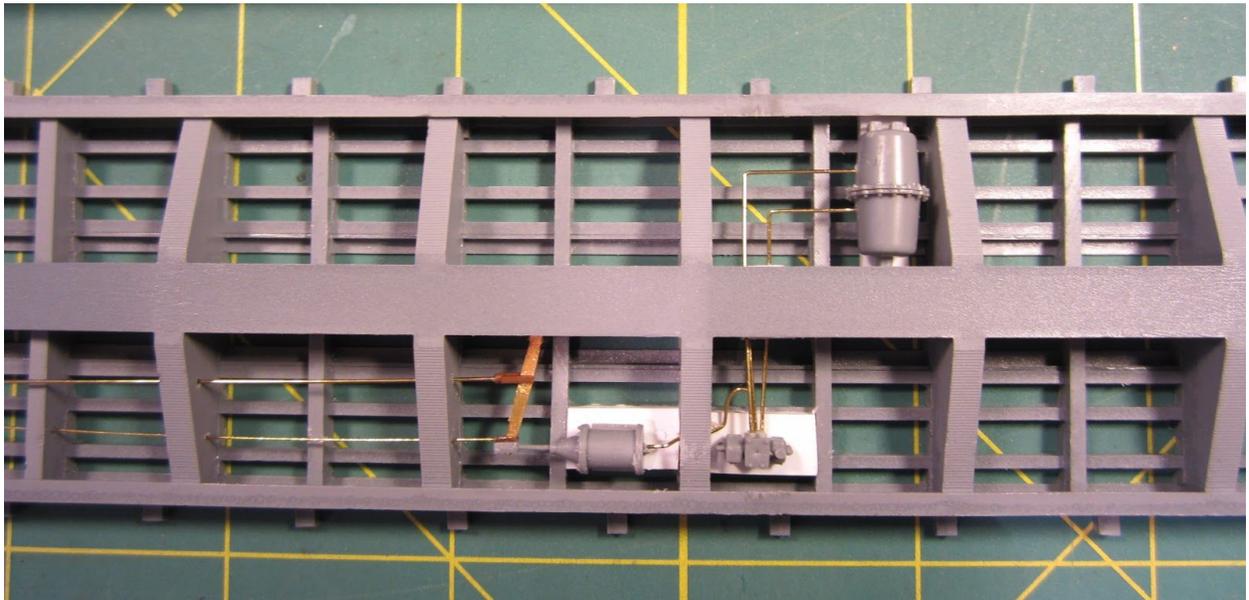
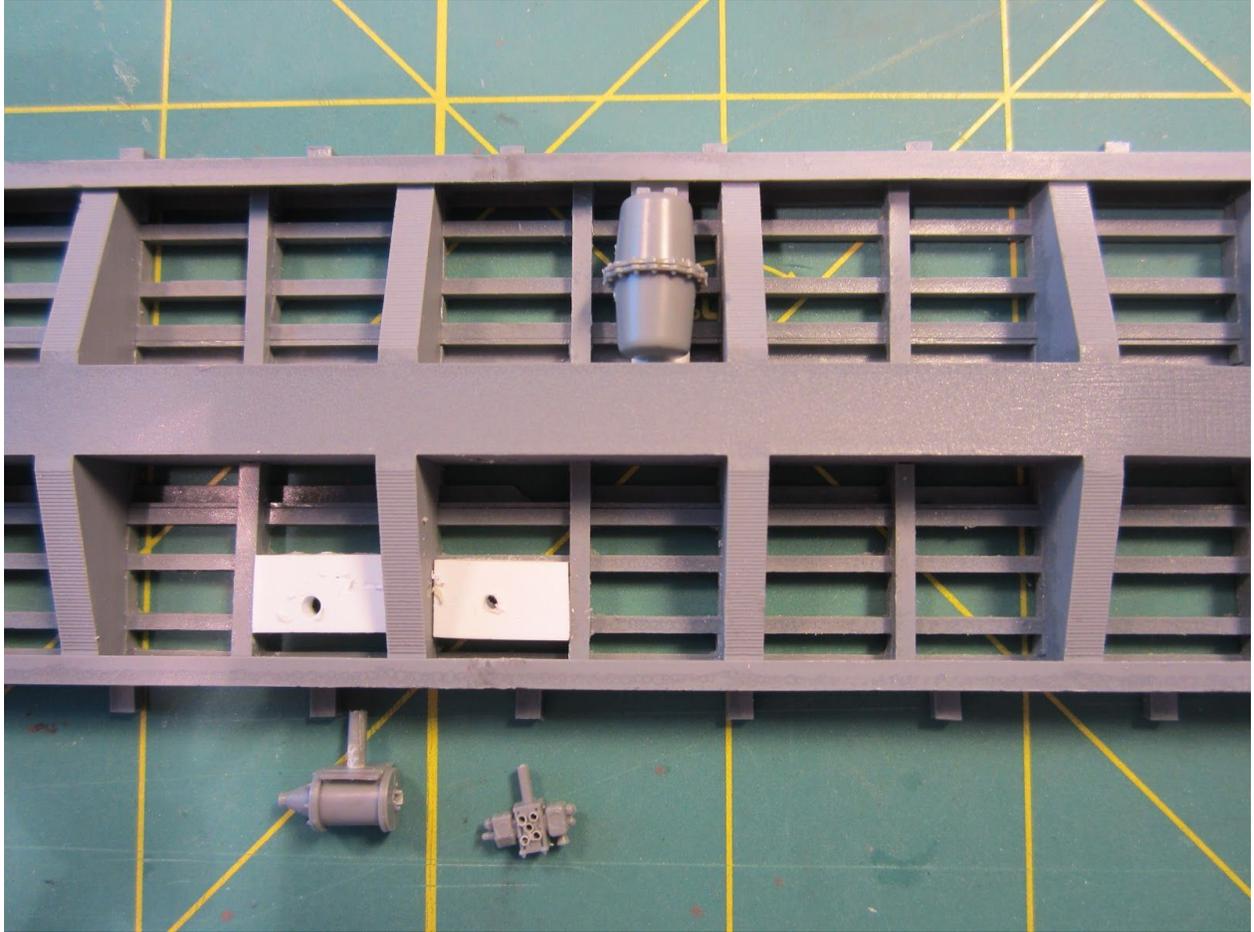
## PARTS LIST:

- 1- cast resin frame
- 3-laser-cut wood deck pieces, all different
- 4-styrene channels
- 1-decal envelope
- 1-AB brake set
- 1-detail bag containing:
  - 1-brake wheel
  - 1-brake wheel stand
  - 4-stirrup steps
  - 8-drop grab irons

1. Clean flash from resin casting. One method is to glue 220 grit wet/dry sand paper to a flat board. Use a dry sponge to grip the part and sand away the flash in a circular motion. There is a good article on this procedure in the April/May 2015 S Resource. The article is available on-line at: <https://sscale.uberflip.com/i/486139-april-may-2015/9?m4=>
2. After all the flash is cleaned, wash the underframe in soapy water, I use “Dawn” to get dirt, dust and any excess mold release off. Several modelers have noticed that it is difficult to remove all the mold release from this casting. So be persistent. You may want to try a citrus cleaner or simple green and an old toothbrush to scrub.

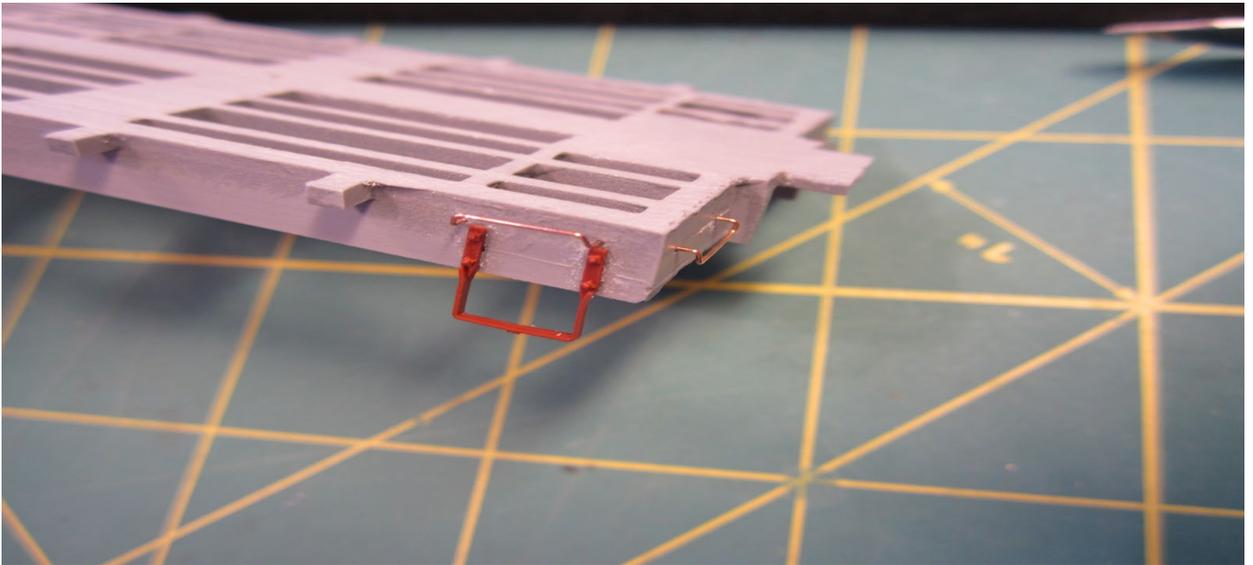


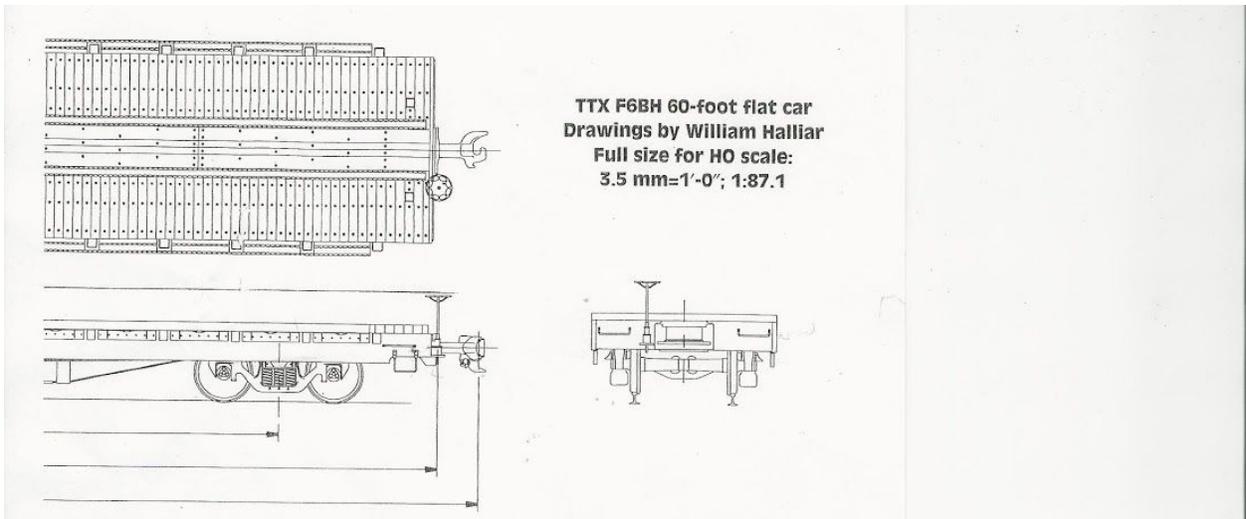
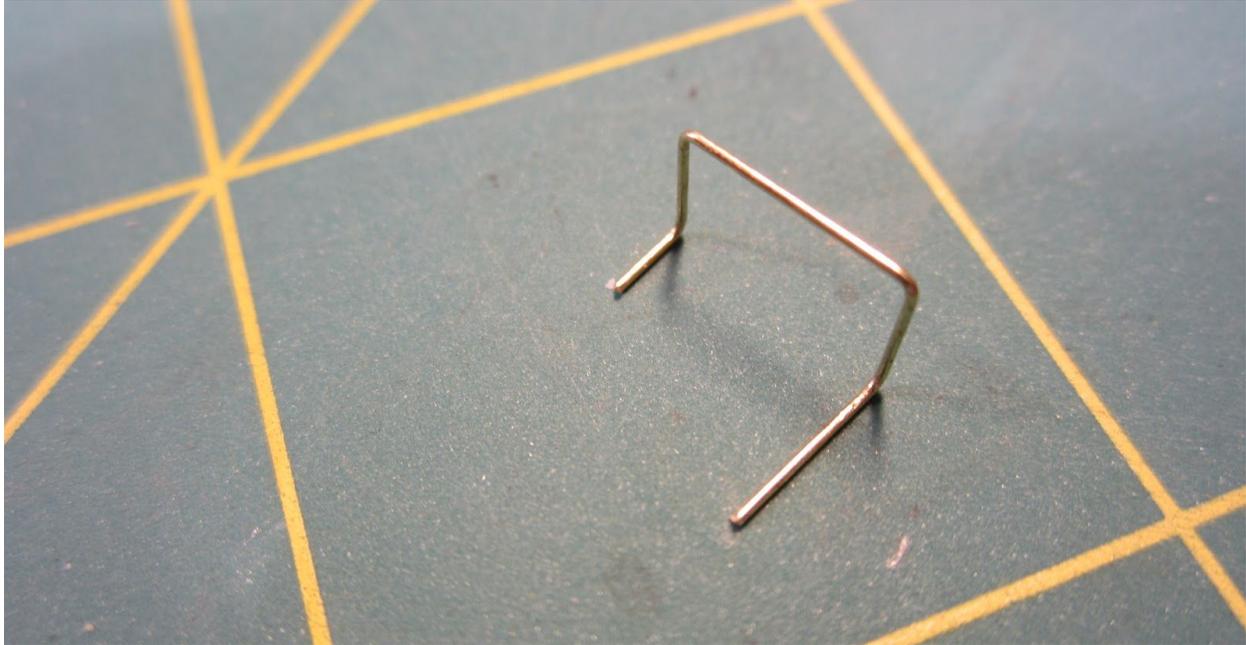
3. Invert the frame and add any brake detail you might desire. Since the car rides fairly low this isn't a requirement. The photo shows some basic detail that has been added. In these photos the brake wheel (notch in the end of the frame) is on the left.



4. This photo shows more brake detail you may want to add. This will not be visible from normal viewing angles. The brake wheel is to the left.

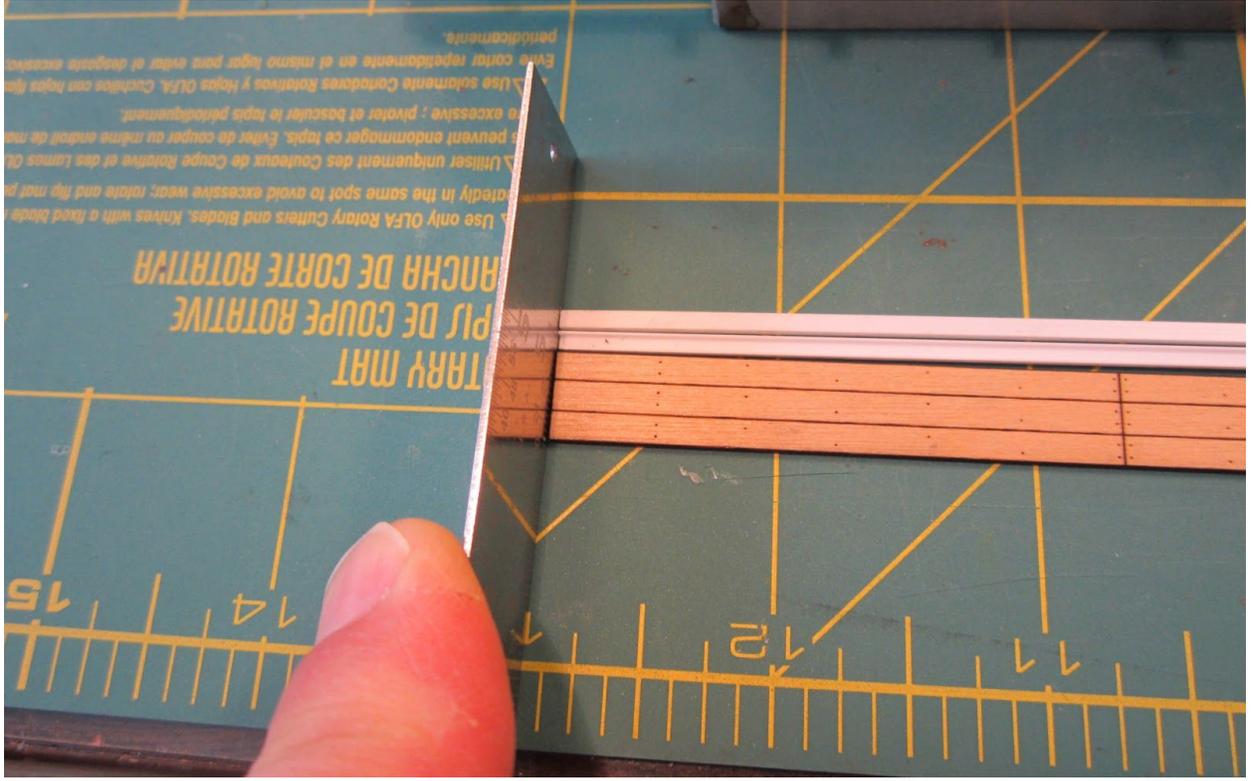
5. While the car is inverted, drill and tap the bolsters for screws to hold on trucks. If you plan to use 2-56 screws, drill with a #51 drill bit and a 2-56 tap.
6. Test fit coupler boxes but do not attach them permanently, unless you wish to paint them. The casting can be trimmed to so the back of the coupler box rests firmly against the frame.
7. Add grab irons and stirrup steps as per Photo. Jim Kindraka used On3 steps from San Juan Car Company, they are a bit oversize. Brass sill steps are provided, they need to be pinned onto the frame to make them secure. The end grab irons bend down, while the side grab irons bend up. The brake end of the car can have a higher grab iron on one side or both. Fashion one from 0.020" wire to be approximately 14" high and 20" wide. See prototype photos at the end of these instructions.

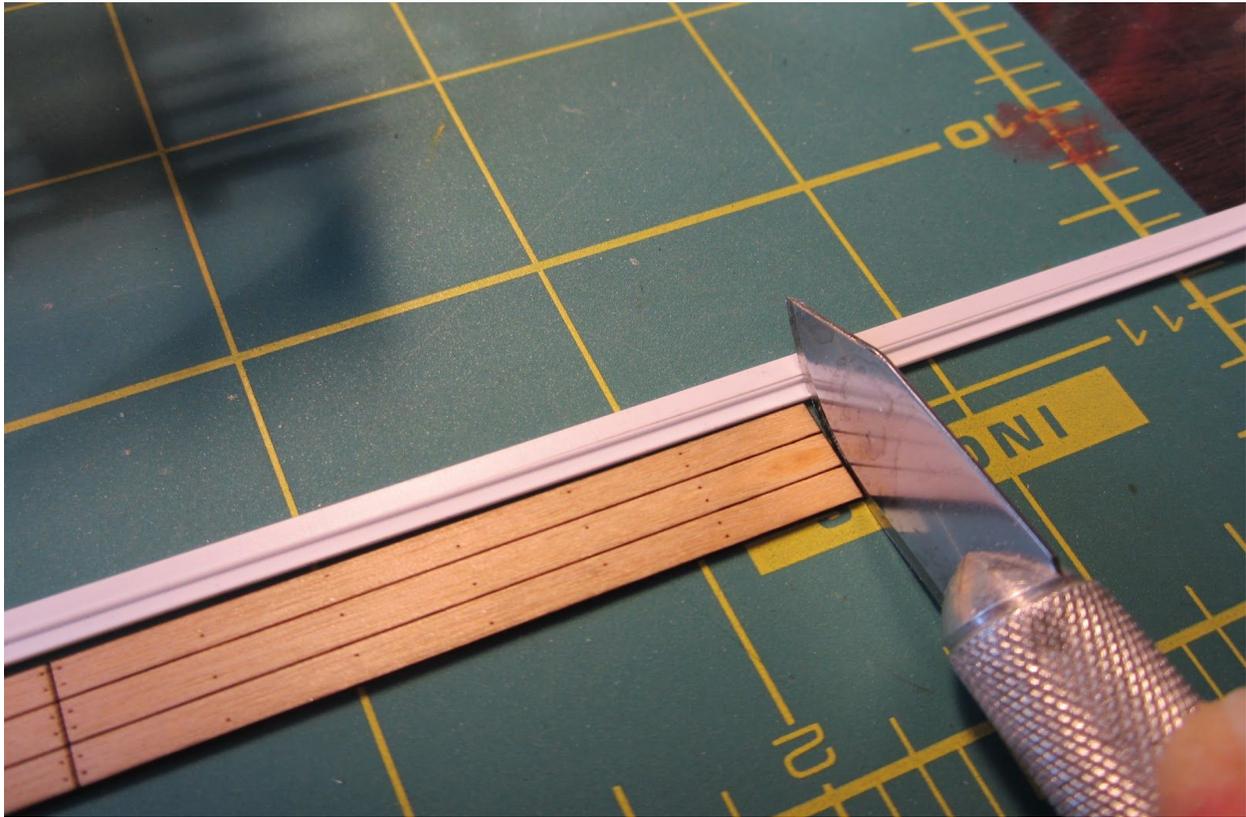




courtesy Railroad Model Craftsman, White River Productions.

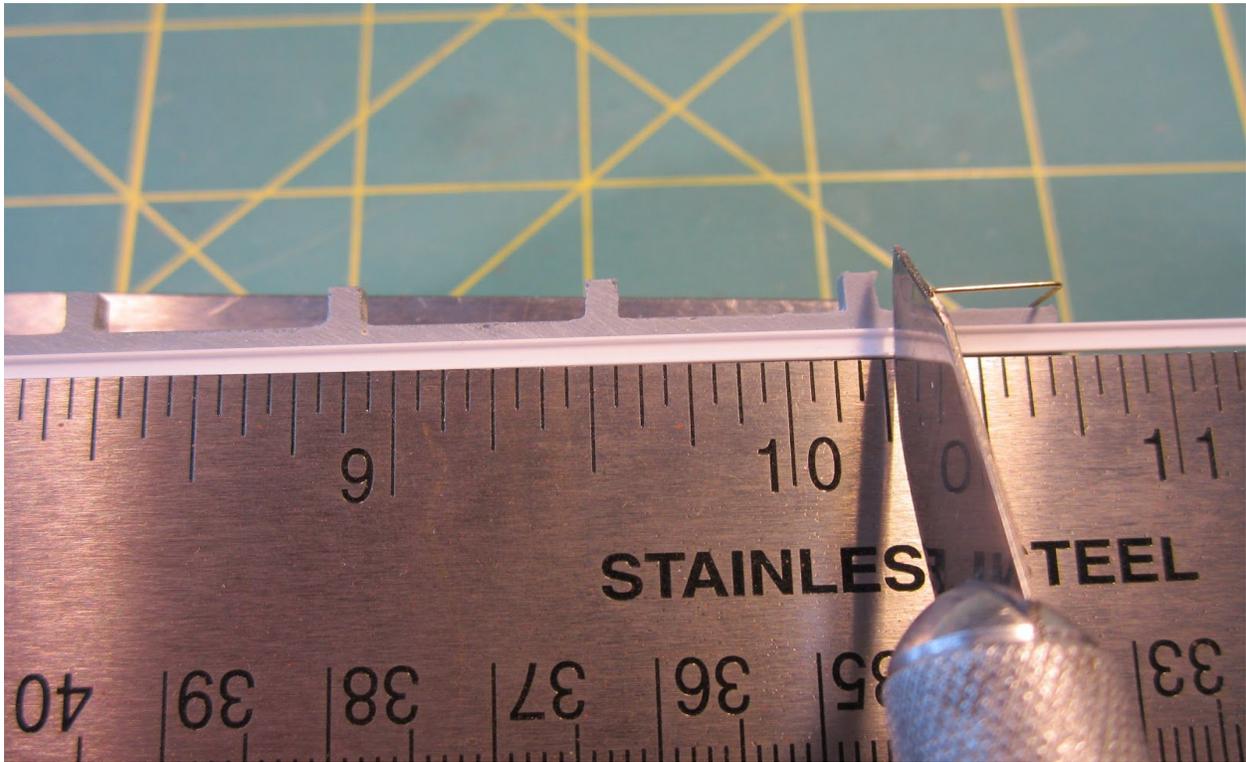
8. Mark and cut two styrene "C" channels to be the same length as the center boards, ~11 3/8ths inches. Cut to length but do not install them at this time.



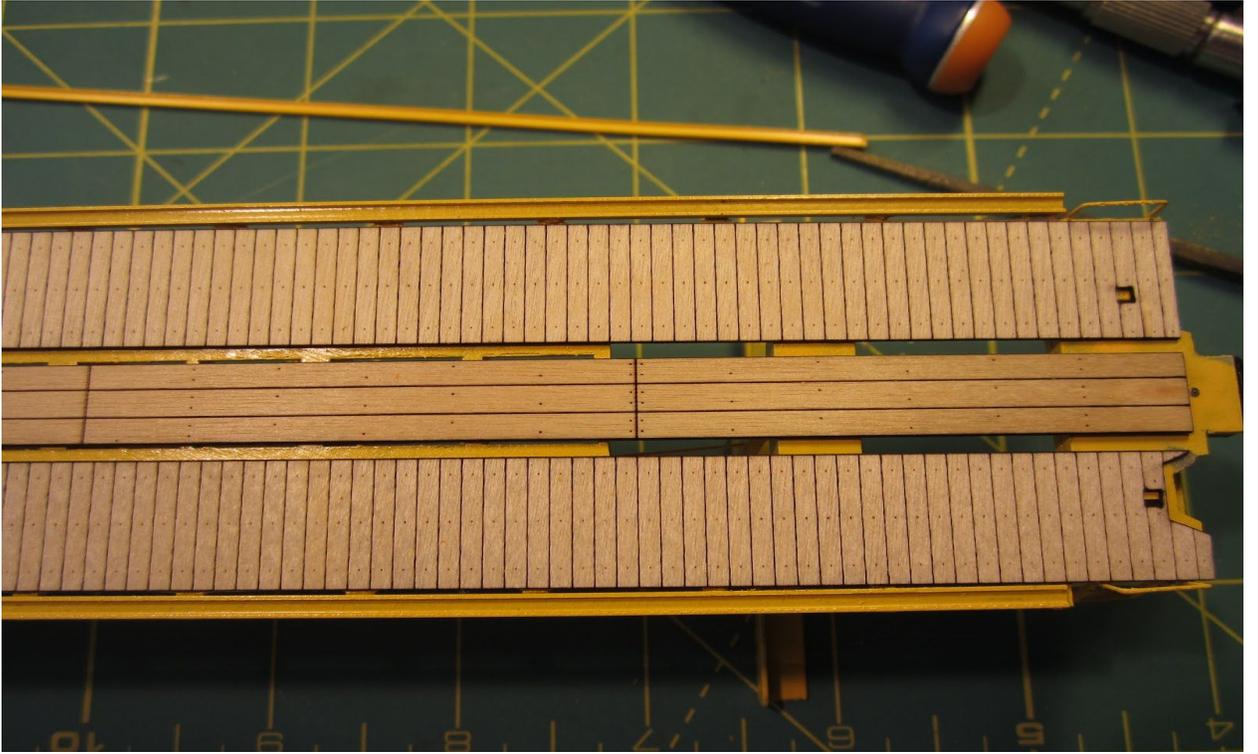


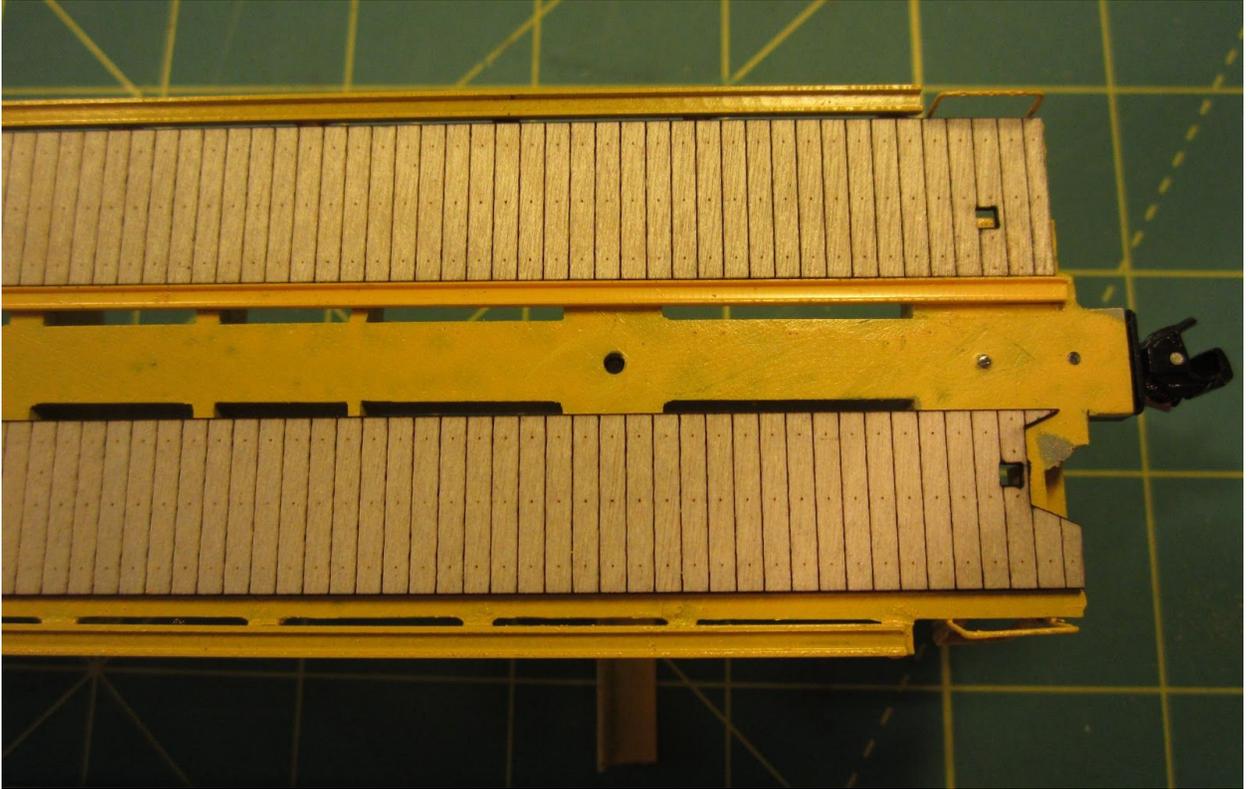
9. Mark and cut two outside styrene “C” channels (~10 ¼”), Photo 8. These should be installed by gluing to the outer edge of the short posts that stick out on the side of the car. On the prototype these are for equipment tie downs and there should be a bit of space between the “C” channel and the car side. Also, if you plan to handle your car a great deal from layout to layout, an alternate for the outermost “C” channel is to use 1 mm x 2.5 mm Brass “C” Channel from Albion Alloys, #CC-2. These add some additional strength as they are made from brass but also cost ~\$12 – 15 for a pair.

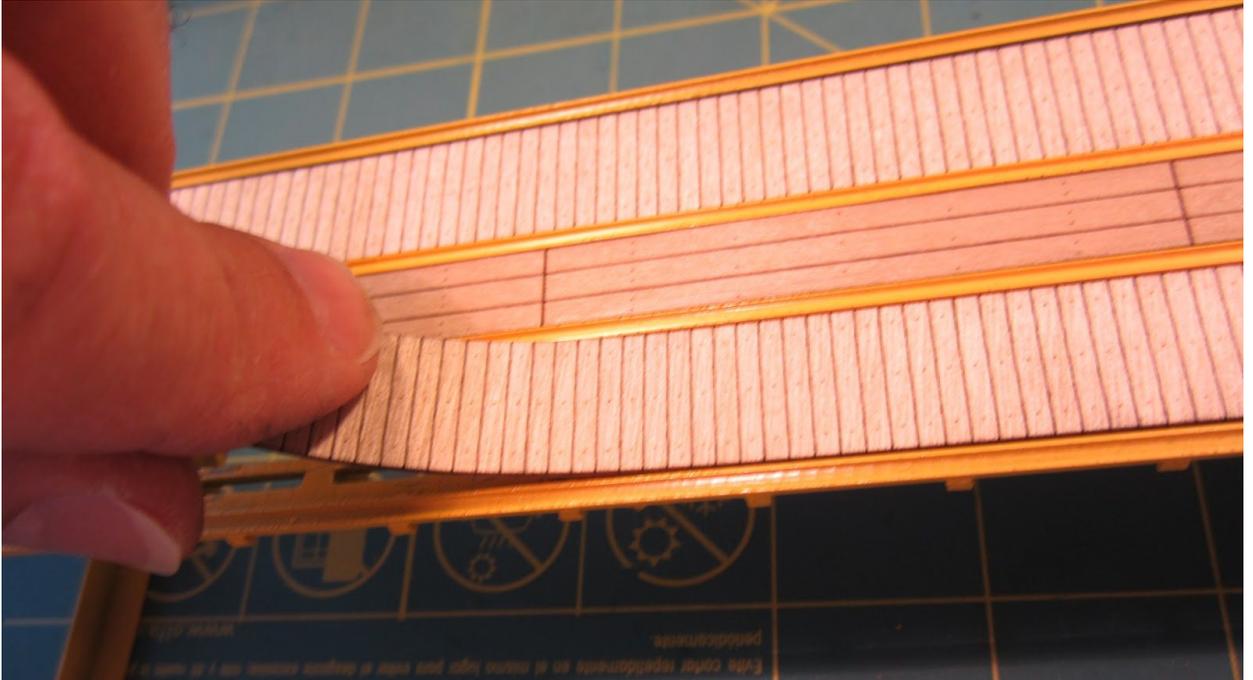




10. At this point the model should be painted. Attached the two cut-to-length interior “C” channels to a piece of cardboard and paint separately from the rest of the model. Accupaint Chrome Yellow #1707 is considered the closest match for the TTX yellow color.
  
11. Once the paint is dry, begin the final deck assembly. Locate the three wood deck pieces as shown in Photo 10 but do not glue them down. Starting at one edge of the model, glue down the wood and then the interior “C” channel. Lightly run a knife edge or finger nail along the underside and lower edge of the “C” channel piece to scrape off any extra paint that may keep the piece from fitting tight. (Photo 11) Continue assembly across the model, Photo 12. When installing the last strip of wood, some light sanding of the edges may be necessary for the best fit, Photos 13 & 14. The final deck should look like Photo 15.





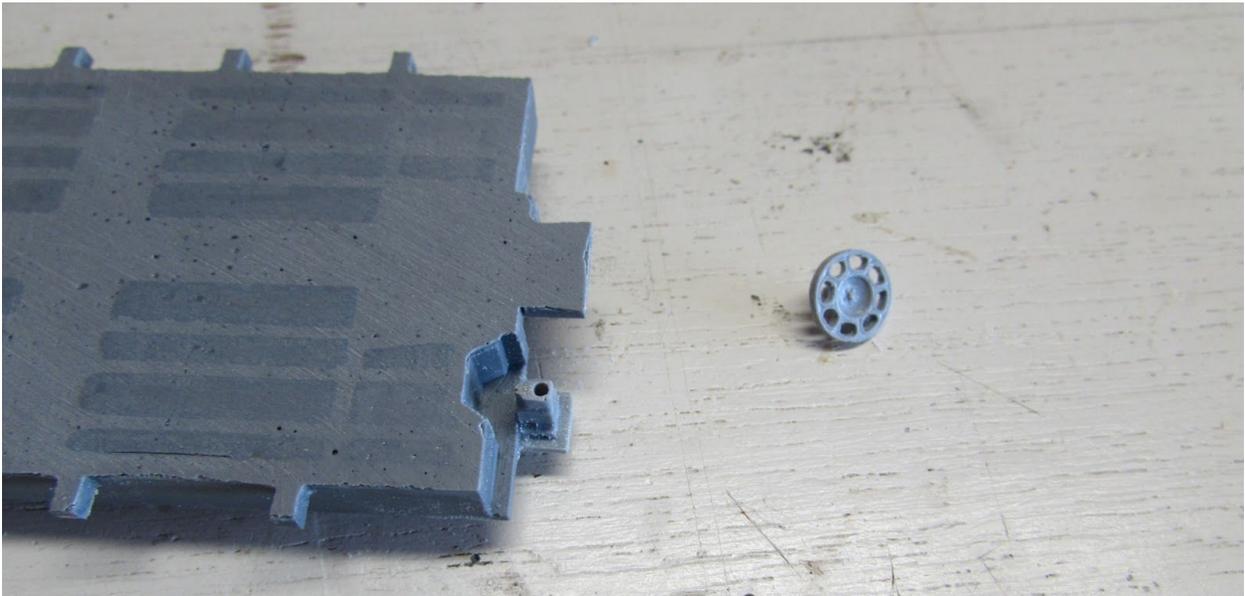
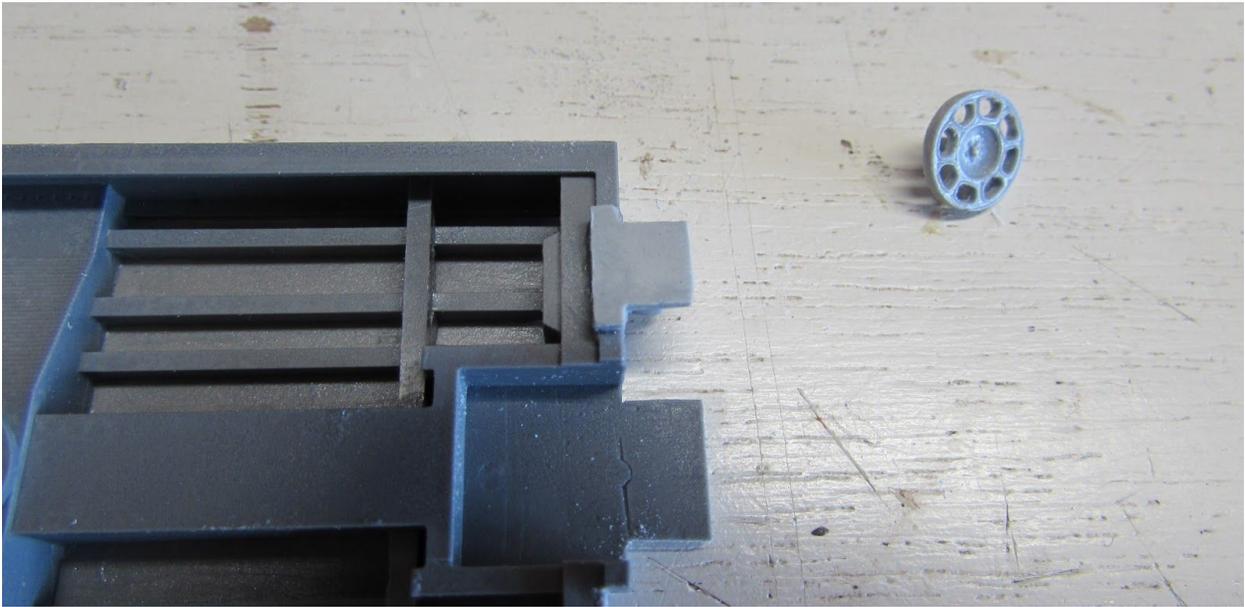


12. The brake wheel. Remove from flashing with rail nippers and then clean up the rim with file or emery board. Drill flash out of holes with a #56 drill and clean up the holes with the tip of a #11 blade.



13. The mounting bracket: Clean up the flash. If you want the brake wheel in the lowered position, drill a #56 in the top of the bracket for the brake wheel. If you want the brake

wheel in the raised position, drill holes for .02 wire in the top of the bracket and in the brake wheel. Glue the bracket to the frame as shown, then mount the brake wheel.



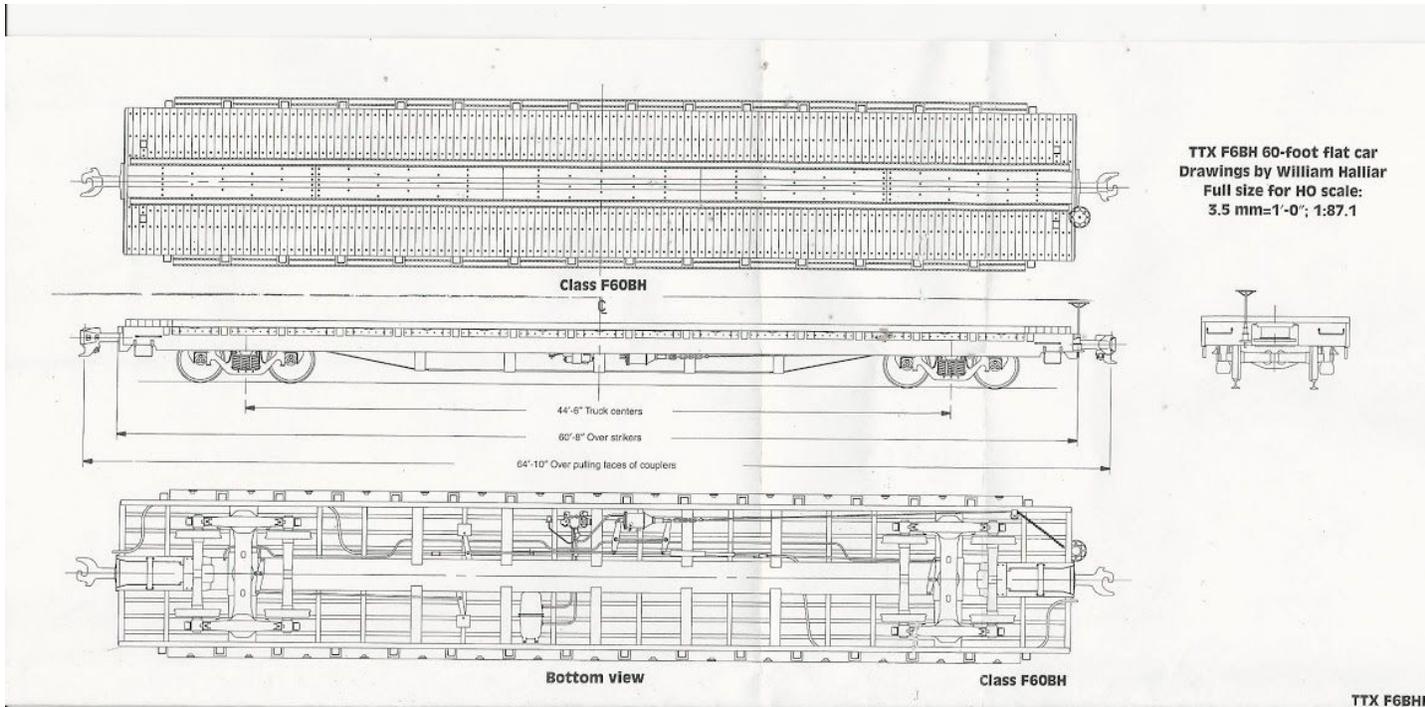


14. Apply decals. The decals are set up so the black background go on first. When they are dry the white lettering goes on the black. This gives you more options for car numbers. Here is Jim Kindraka's advice. "I agree that Tichy's heralds can be a bit thick. I have been successful using them after learning several great decal techniques from the military modeling folks - who take modeling to unbelievable new levels. Those guys use some super strong setting solutions made by Tamiya and Testor's. I've settled on the Testor's Model Master Solution for complex surfaces. When used correctly I have found it is 'spot on' for melting thicker decals into position."

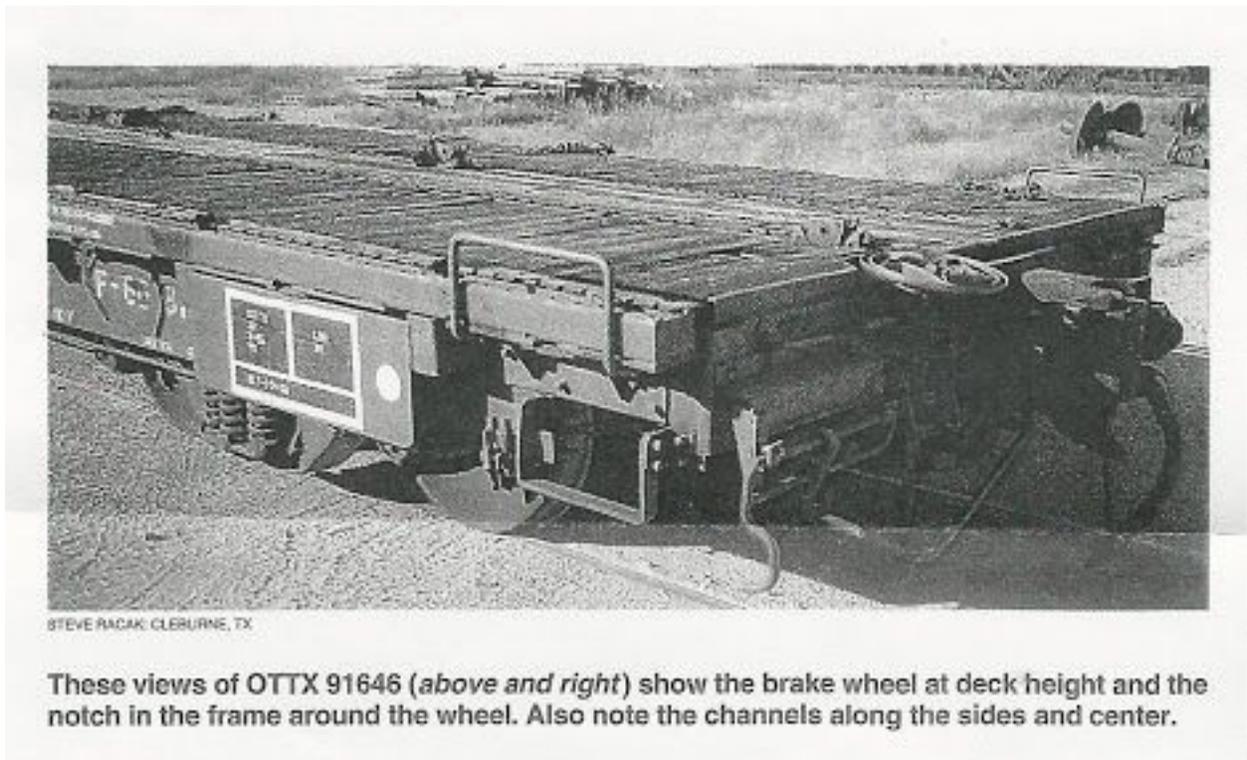




15. Install couplers of your choice. A note about weight. One way to add weight to the car is to mount a load of farm equipment or construction vehicles. If you want hidden weight I suggest you get a roll of 50/50 or 60/40 solder and glue pieces into the frame recesses. Start above the trucks and make sure the added weight is equal end to end and side to side.
  
16. Install trucks of your choice. As built, the cars were equipped with either ASF Ride Control or Barber S2 70-ton trucks. Later, some of the cars may have been equipped with Buckeye Cushion Ride or National C-1 70-ton trucks. MTH makes a 70 ton Barber S-2 roller bearing truck, available from Port Lines Hobbies, <http://64.251.10.24/~worldofw/cgi-bin/shopplcom.pl/SID=204622812/page=results-new.html>. American Models stocks roller bearing trucks. Smokey Mountain Model Works [www.smokymountainmodelworks.com](http://www.smokymountainmodelworks.com) makes a 70 ton Barber S-2 roller bearing truck with rotating end caps to order in batches.



courtesy Railroad Model Craftsman, White River Productions.



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This link has a bunch of prototype photos, go to HTTX and OTTX.

[http://canadianfreightcargallery.ca/cgi-bin/search.pl?car\\_type=flatcar&display=short](http://canadianfreightcargallery.ca/cgi-bin/search.pl?car_type=flatcar&display=short)

