

RESIN CAR WORKS
RCW
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Freight Cars of Every Description

**Mini-Kit #4.1 (Map) &
#4.2 (Ship-n-Travel)
ATSF FE-22 & 23
50' Rebuilt Autobox**



Santa Fe photo, Keith Jordon collection

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 and their operations with others by providing unique and different equipment that is not readily available. Several friends assist with various production phases, so it is 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 the gorgeous castings; Ken Soroos for the decal artwork; and to Eric Hansmann the keeper of the website and blog.

This is a "CRAFTSMAN" level resin mini-kit and its construction should not be attempted by anyone who has not built similar types of models. The mini-kit consists of a resin detail parts, Tahoe Models Dalman truck sideframe with lateral motion devices, Tichy ladders and decals. The modeler will have to supply: a plastic LifeLike/Walthers Proto 2000 50' automobile boxcar with end doors; stirrups; assorted wire sizes and grabs; and all other parts to create a finish model. See the Resin Car Works website (www.resincarworks.com) for mini-kit instructions, more prototype information, and photos.

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, do not 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, which 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. Your workspace should have air circulation and/or ventilation. Always work in a well-ventilated room. Wear a dust mask or respirator and safety glasses for protection. Always wash your hands when you are finished working.

History - Prototype

In 1941, the Santa Fe began a rebuilding program of the 1928 Fe-S class ARA 50' double-sheathed boxcars into all steel double door boxcars. The cars retained their original indented Dreadnaught end on the "B" end but received new end doors on the "A" end. These became 150 Fe-22 class general services boxcars in the 7000-7149 series. Fifty additional Fe-22 cars in the 7150-7199 series along with 200 Fe-23 class car in the 6786-6999

series became auto parts cars. The Fe-22 and 23s kept their original Dalman two level trucks. For a complete history of these cars, please refer to *Santa Fe Railway Rolling Stock Reference Series – Volume Three Furniture and Automobile Box Cars* by Richard H. Hendrickson published by the Santa Fe Railway Historical and Modeling Society.

History – Mini-kit

Charlie Slater created the patterns for this mini-kit. Sunshine Models issued the kit in 2006. Recently I found an extra P2K 50' boxcar with an end door in my stash so I built one. It was a fun and easy build so I thought it would make for a nice RCW mini-kit. After pasting down the side sills and end there was a lot of space left on the sheet. What's added to the original Sunshine mini-kit are parts to create a correct a mid-20's ARA underframe. The construction photos used a single door 50' P2K kit, as that's all I had. The model won't be wasted as I'm working on side sills for the Fe-21.

Construction

- **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 is referring to an item that the modeler is to supply.**

Step 1

Remove the lower side sills of the plastic car body. Cut in the horizontal groove at the bottom of the side sheets and remove. When completed the floor will be even with the sides (see photos 1 and 2).



Photo 1

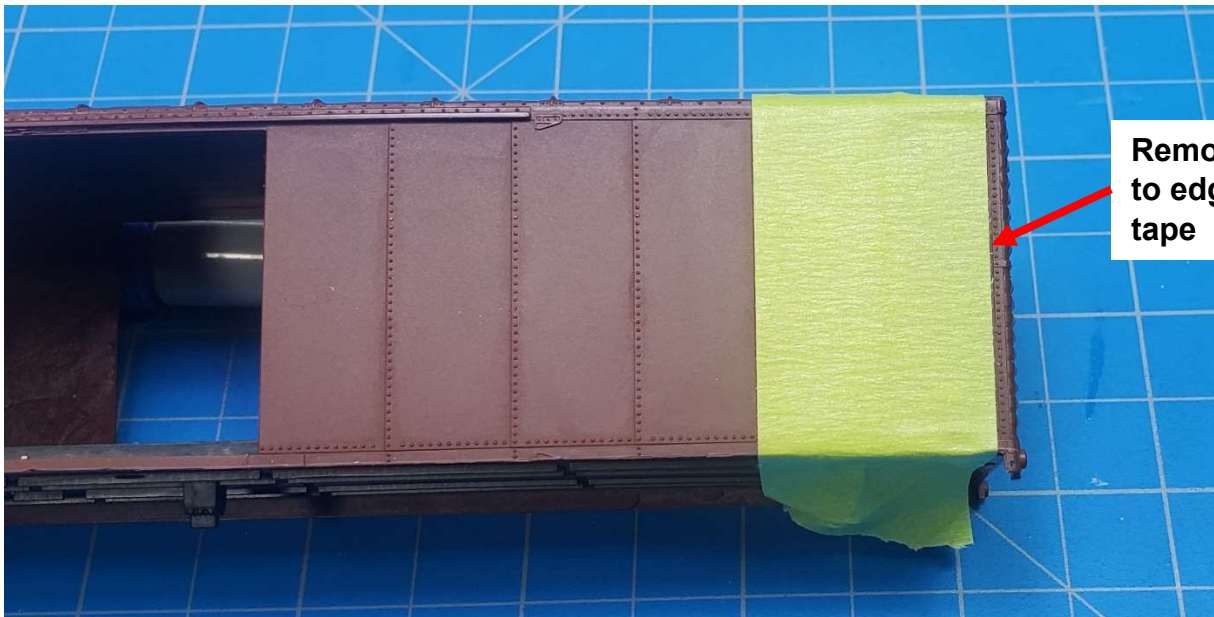


Photo 2

Step 2

Remove the existing 5/5 Dreadnaught, "B" end of the plastic body. The end needs to be removed to the seam between the end and side (see photo 3). I like drilling a series of holes next to each other around the end, close to the car sides, to remove the end. Install the cast end ensuring that the top of the end is even with the roof. Fill the seam between the end and roof and sand smooth.

Photo 3



**Remove end
to edge of
tape**

Step 3

Shorten the underframe at the "B" end to fit, as the new end is thicker than the plastic one. Cement the floor even with the car's sides.

Step 4

Trim and cement the cast side sills on the floor lining up the edge of the side sill gussets with the edge of the side. Cut the width of the plastic underframe cross members and bolsters to fit between the side sills. Alternatively, cut the bolsters from the frame, install the bolsters, and build a new ARA underframe on the floor. You will have to remove the stringers and airline for the floor for the ARA parts to fit.

Step 5

Build the car using the kit instruction, except mount the air reservoir longitudinally (see photo 4). Add the large cast "U" plate to the "A" end (end door) under the coupler box (see photo 5).

Photo 4 underframe



Photo 5 end door



“B” end of car

Step 6

The P2K kit ladders do not have enough rungs so Tichy ladders have been provided. The Tichy ladders need to be modified with an additional rung will need to be added. Trim the top of one ladder just above the bolts of the rung. Trim the bottom of another ladder just above the rung itself. Dress the edges up with a file to maintain spacing. Working on a plat of glass, cement the two sections together. There are small tabs on the underside of the Tichy ladder that need to be removed. Dress the ladder with a file, cut to fit and attach to the car.

Step 7

The cars were painted with Santa Fe’s standard freight car scheme, mineral brown sides, end, underframe, and trucks with a black roof. The train slogan is on the left side of the car as viewed from the “B” end, and the map or Ship and Travel on the right side.