

**RESIN CAR WORKS**  
**RCW**

**P.O. BOX 42  
BYRON, IL 61010**

*Freight Cars of Every Description*

**2018 RPM Chicagoland  
Mini-Kit**

## **FGEX Truss-Rod Reefer Series 14000 and 20000**

### **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 to provide unique and different equipment that isn't readily available.

This is a "CRAFTMANS" level resin Mini-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 Mini-Kit concept goes back to the Sunshine Models days, when the event was hosted by Martin Lofton. Martin enticed early registrations to the event by offering a limited run Mini-Kit as a gift. Some years it was simply a set of custom decals and other years it was a few smaller resin parts, like a set of doors or boxcar ends. The idea was that the Mini-Kit could be used to dress up a readily available plastic freight car as a new prototype model. You can actually view the list of past kits on the web at [www.sunshinekits.com](http://www.sunshinekits.com).

This year we bring you the Fruit Growers Express Truss Rod Reefer Mini-



*All Model and Construction Photos by Frank Hodina*

Kit. It is intended to allow the conversion of a readily available model into one of the former L&N truss rod cars (numbered 21357) or one of the former B&O cars (numbered 14409).

The kit consists of resin detail parts, decals and a Tichy reefer under-frame, turnbuckles, queen posts and K brake system. Components for an AB brake system are also on the resin detail parts sheet. The modeler will need to supply the Accurail reefer body, all wire, grabs, stirrups, any small styrene bits, couplers, weight, trucks, wheels, small screws and anything else needed to complete the model.

### **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 other product(s) used to construct and/or contained in this kit. This kit contains polyurethane castings. Although non-toxic in their 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

The “new” Fruit Growers Express was formed in 1920 and inherited a large number of cars from the former subsidiary of Armour Incorporated

that was known by the same name. At that time, 4279 cars were part of the fleet. In December of that same year, FGEX began purchasing additional second-hand refrigerator cars from the Chicago and Eastern Illinois, and Frisco Refrigerator Line. By the end of 1920, FGEX was operating over 5200 cars.

In 1923 the Louisville & Nashville joined its refrigerator car fleet with FGEX. These cars were numbered into the 20000-21849 series. In 1925 the Baltimore & Ohio followed suit and brought its own group of older cars, including truss rod cars, into the fleet. Those cars were numbered into the FGEX 14000-14998 series.

More information on these cars can be found in the article “Truss Rod Refrigerator Cars of the Fruit Growers Express / Western Fruit Express / Burlington Refrigerator Express Consortium, Part One: The Prototypes” by Bill Welch and published in the book “Prototype Railroad Modeling, Volume Two” available from Speedwitch Media at [www.speedwitchmedia.com](http://www.speedwitchmedia.com).



*Ted Culotta collection*





Bill Welch collection



## Construction

It's recommended that before you start construction that you familiarize yourself with the additional information and photos on the **Resin Car Works** website [www.resincarworks.com](http://www.resincarworks.com) that pertain to this kit.

➤ 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 they 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.

### Step 1

Score a line across the sub-side of the Accurail body 0.185” from the bottom. Saw down along the inside of the sub-side at the ends. Now snap these bottom pieces and remove them. You'll be removing the bottom of the car body up to the middle of the lower holes. Clean up with a file (*Photos 1 and 2*).

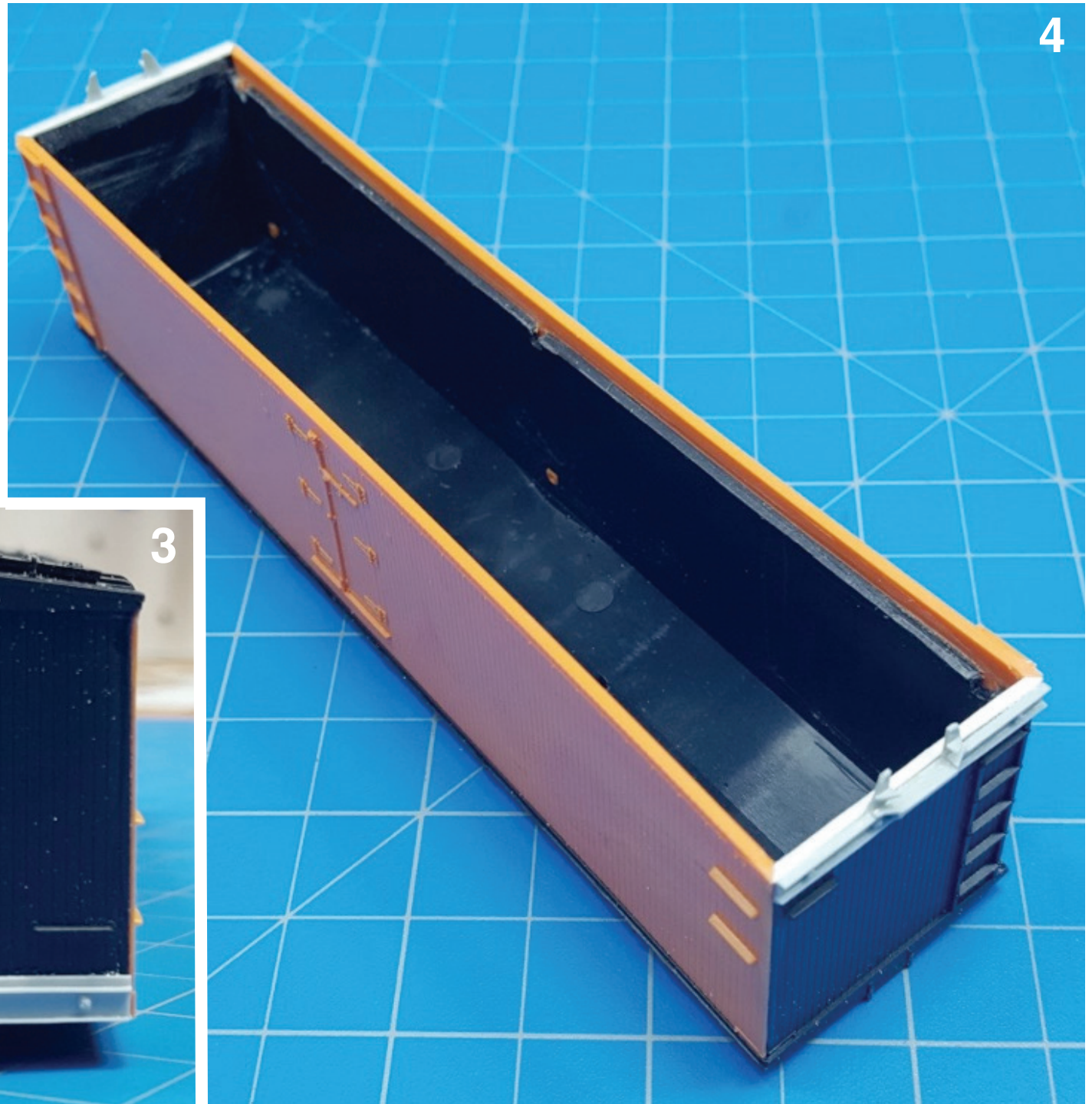
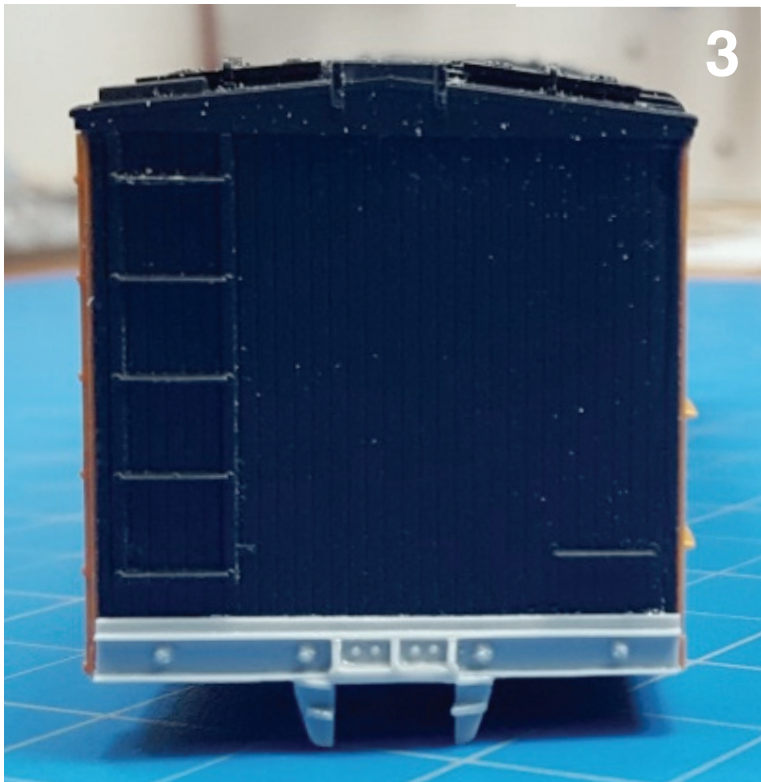




## Step 2

Remove the lower mounting pins located on the back side of the yellow sides and attach the sides to the body. Add a scrap piece of HO styrene 2x4 to the bottom of the end to even it up with the side. Attach the resin end sills to the bottom of end with the bottom of the end sill channel being even with the bottom of the styrene 2x4 (*Photos 3 and 4*).

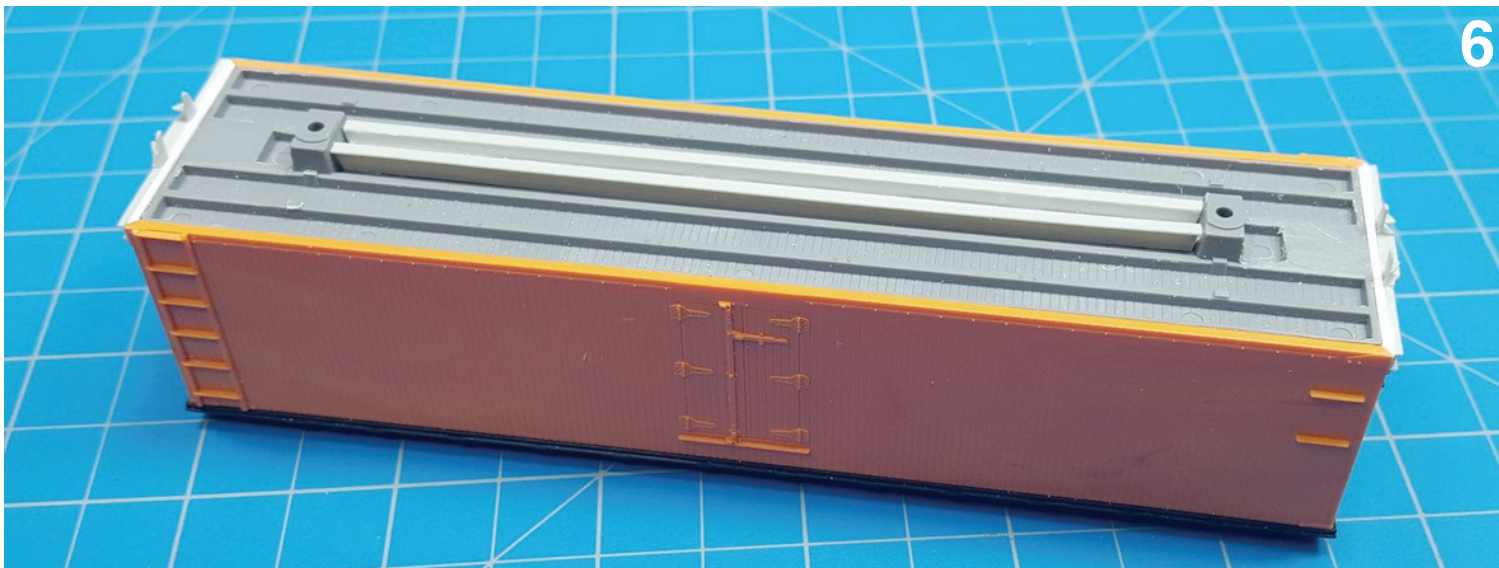
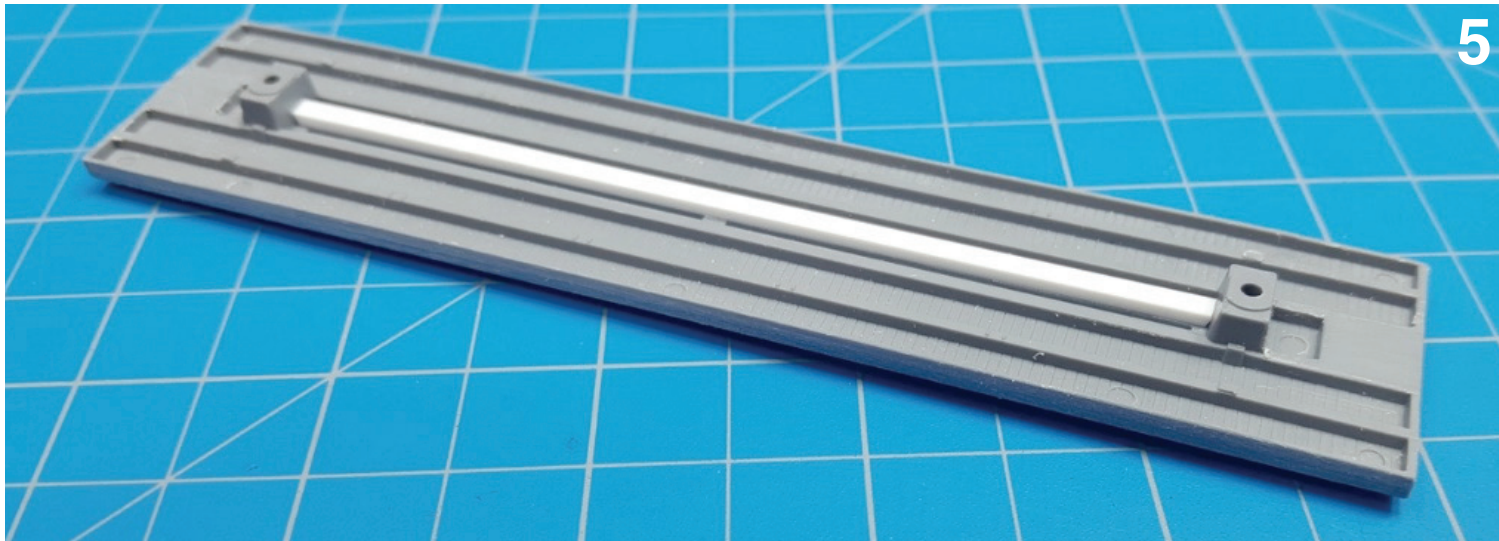
You can stop here with detailing the body, or remove the cast on details and install new grabs, ladders and hatch supports.





### Step 3

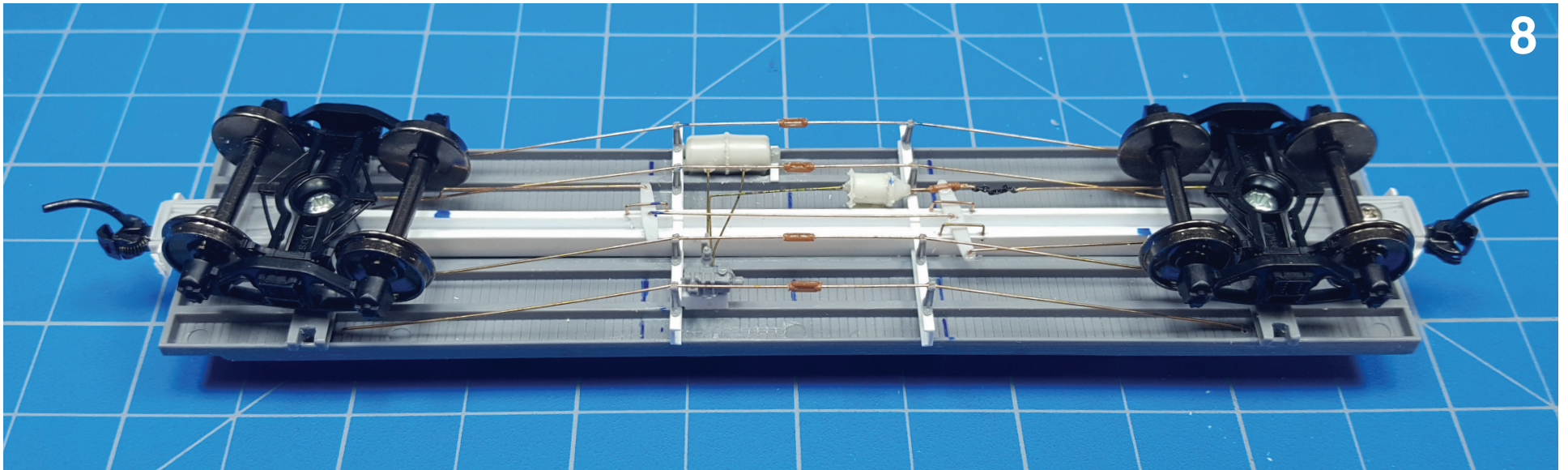
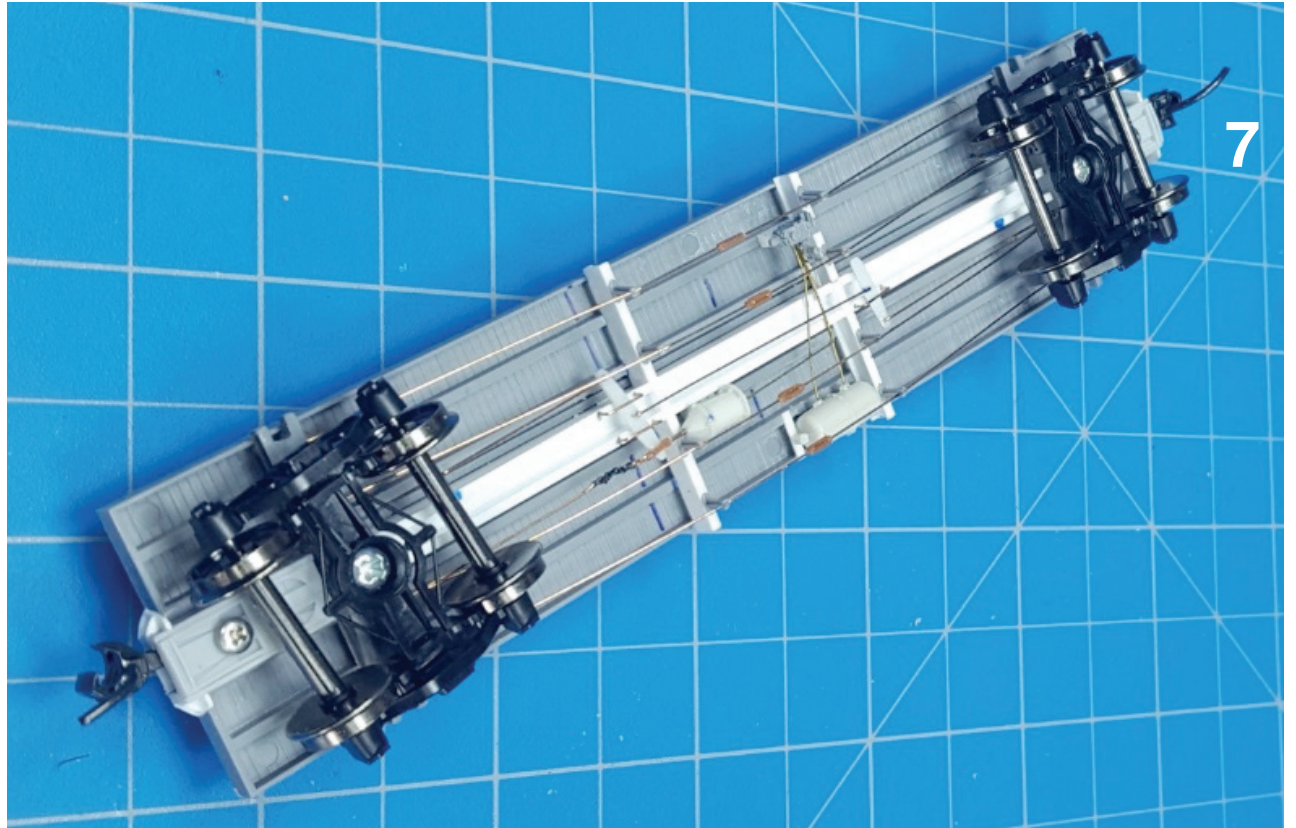
Narrow the Tichy floor until it fits into the modified Accurail body and remove the coupler pad down to the level of the floor stringers. Attach a piece of scrap HO 0.060" x 0.100" styrene between the bolsters, centered on the floor. Attach the resin center sills to the 0.060" x 0.100" styrene (*Photos 5 and 6*). Attach the cross-bearer channels. Locate them 4 feet from the center of the car or 8 feet apart. Set the floor in the body (don't glue yet) and attach the coupler boxes to the underframe, fitting them between the gussets located on the resin end sills. Drill and tap holes for 1-72 screws for the couplers. The coupler boxes will accept only Kadee No. 158 semi-scale Whisker couplers (*Photos 7, 8, 9, and 10*). Now remove the underframe.



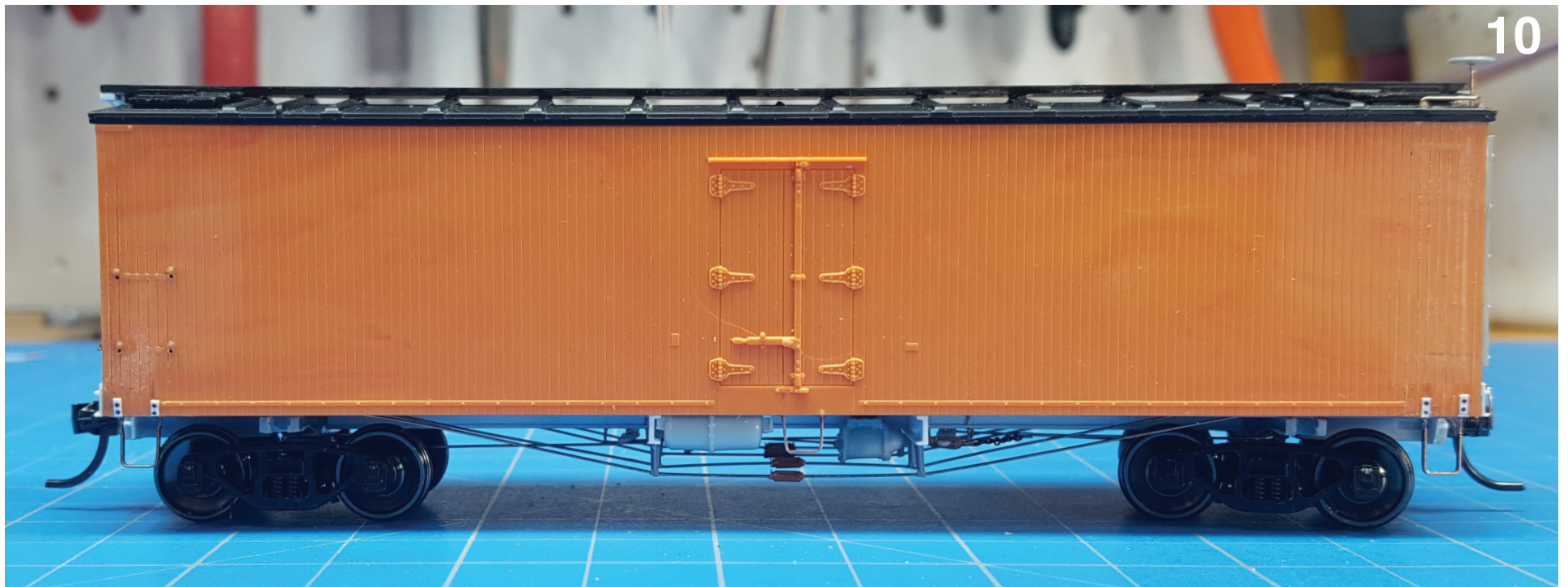
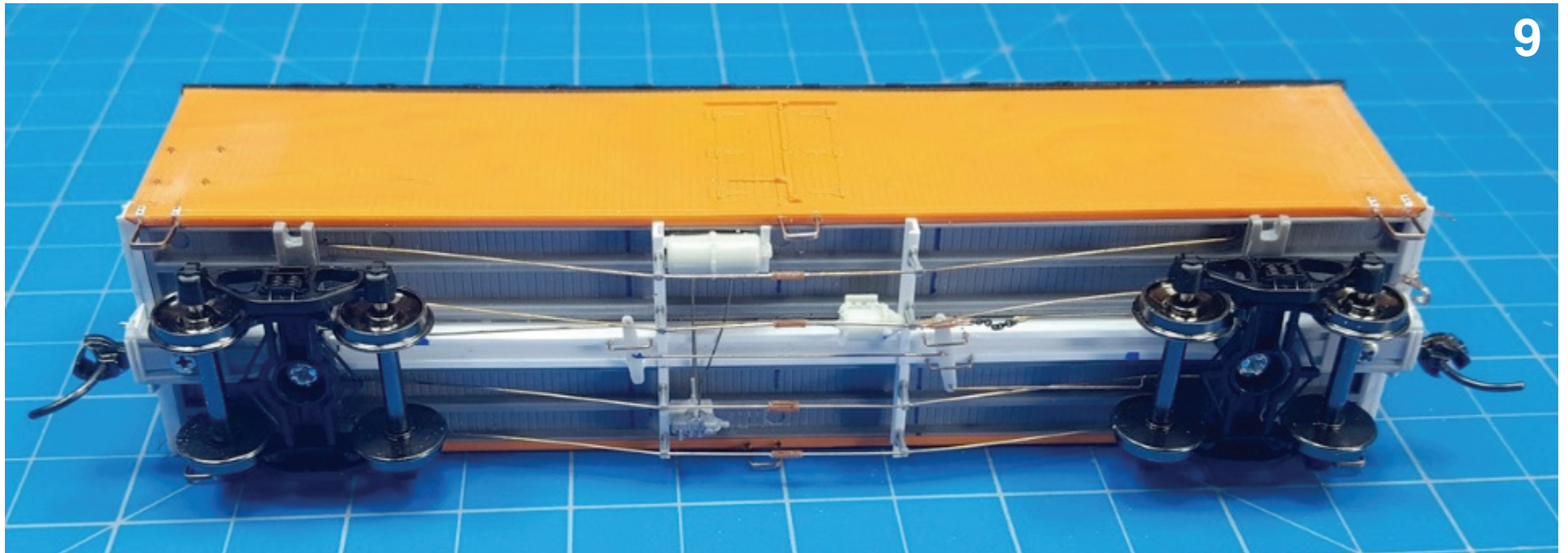


#### Step 4

Complete the underframe as shown (*Photos 7, 8, 9, and 10*) by adding the brake gear of your choice (K or AB). Attach the queen posts in the locations shown. Use 0.0125" brass wire or 0.015" fishing line for the truss rods. Don't forget to slip the turnbuckles onto the truss rods before installing them.









## Step 5

Complete body detailing by adding roof corner grabs, roof walk supports, brake wheels, stirrups, cut levers, etc. (Photos 11, 12, 13, and 14)

## Step 6

It's easier to paint the model with the underframe separated from the body. For FGE yellow I've found that UP Armour Yellow is a good match. I used an old bottle of Floquil that I had. For the brown, any boxcar red will work. The underframe is black; any black you prefer will do.



*Ted Culotta collection*



*Ted Culotta collection*







