

**RESIN CAR WORKS**  
**RCW**  
 P.O. BOX 42  
 BYRON, IL 61010  
*Freight Cars of Every Description*

**Mini-Detailing Kits C&EI-HM and MP-HM**  
**Chicago & Eastern Illinois & Missouri Pacific**  
**1935 A.A.R. 50-Ton Offset-Side Twin Hopper Cars**

**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. Several friends assisted with various production phases so it's 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 his casting work; Dave Campbell for the decal artwork; Ken Soroos for his help with formatting the instructions; and Eric Hansmann, the keeper of the website and blog.

This mini-kit consists of a sheet of resin detail parts and a decal set. The modeler is to supply the hopper car, any small styrene bits, wire, couplers, trucks, etc. needed to complete the model. The recommended car is an Atlas offset-side twin hopper, as these are readily available and have only basic details. An Athearn hopper will also work, but they're getting harder to find as kits.

**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



*All models and model construction photos by Frank Hodina*



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.

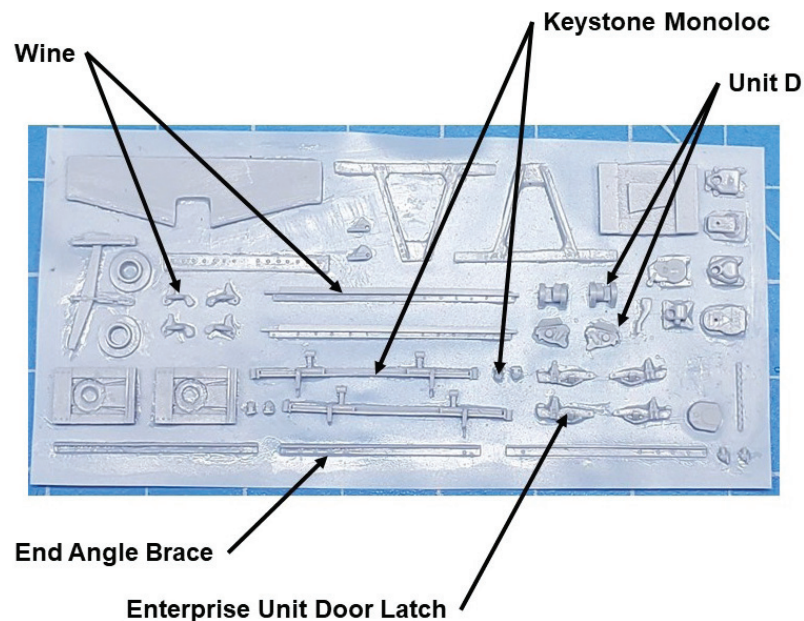
## History

A complete history of just about any and all 50-ton offset-side twin hoppers can be found in **Railway Prototype Cyclopedia**, Volumes 1, 2, 4, 8, 9, 13 and 25. Volume 25's article is some 82 pages and completes and updates the previous six articles. Information on C&EI and MP hoppers is in Volumes 9 and 25. Volume 31:2 of "The C&EI Flyer," the official magazine of the C&EI Railroad Historical Society, also has an article on the road's twin hoppers. In general, the C&EI decal set is for the dark gray cars in the 97500 to 97999 series constructed in 1945 and the freight car red cars in the 96000 to 96499 series constructed in 1948.

## Getting Started

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.

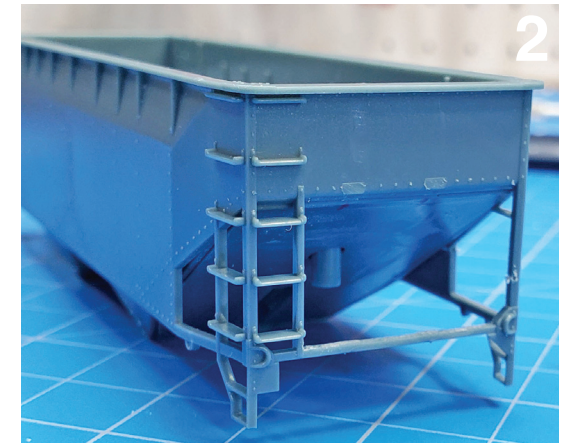
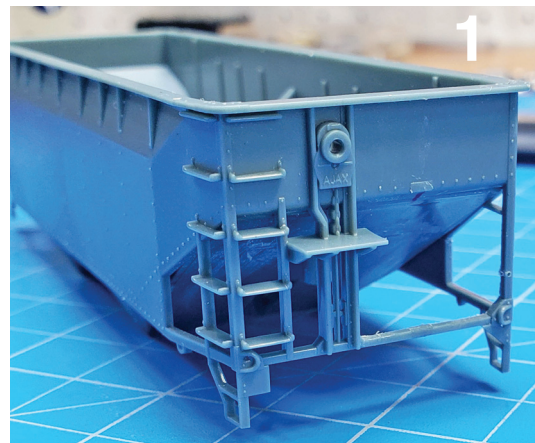
➤ When a measurement is given, it's in prototype feet and inches.

➤ When the word "scrap" is used, it refers to an item that the modeler is to supply.

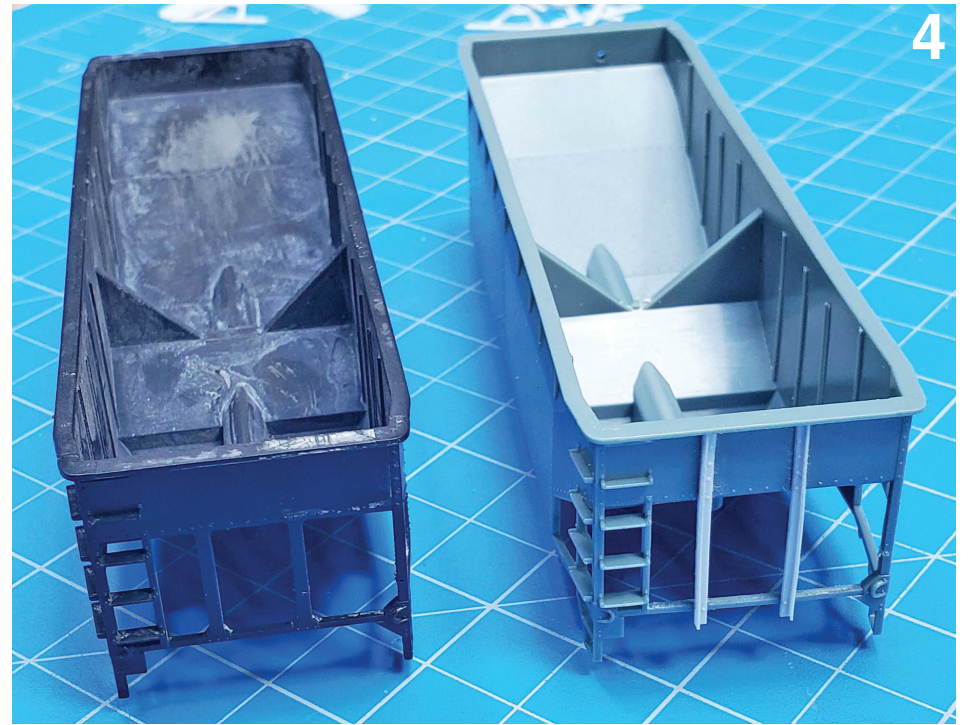
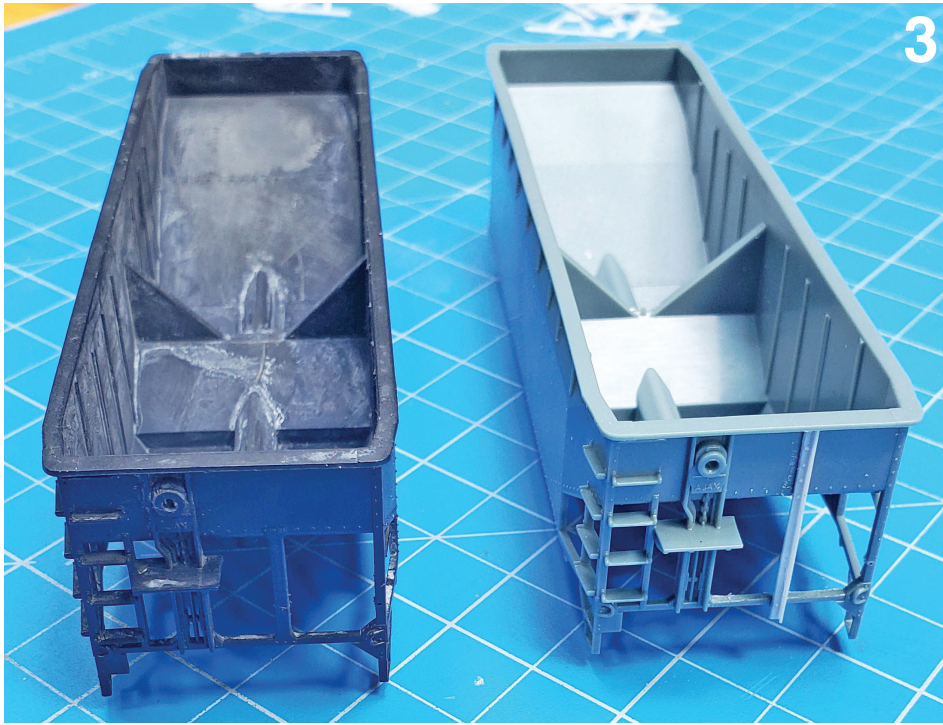
## Construction

**Photos 1 and 2 (Below):** If you're modeling a hopper with angled end bracing, you can attach the resin angles to the existing braces, or remove the existing bracing and the long grabs on the shell's corners.

**Photos 3 and 4 (Page 3):** Attach the resin angles and drill new holes in the braces, corner angle and car side for the long grabs.

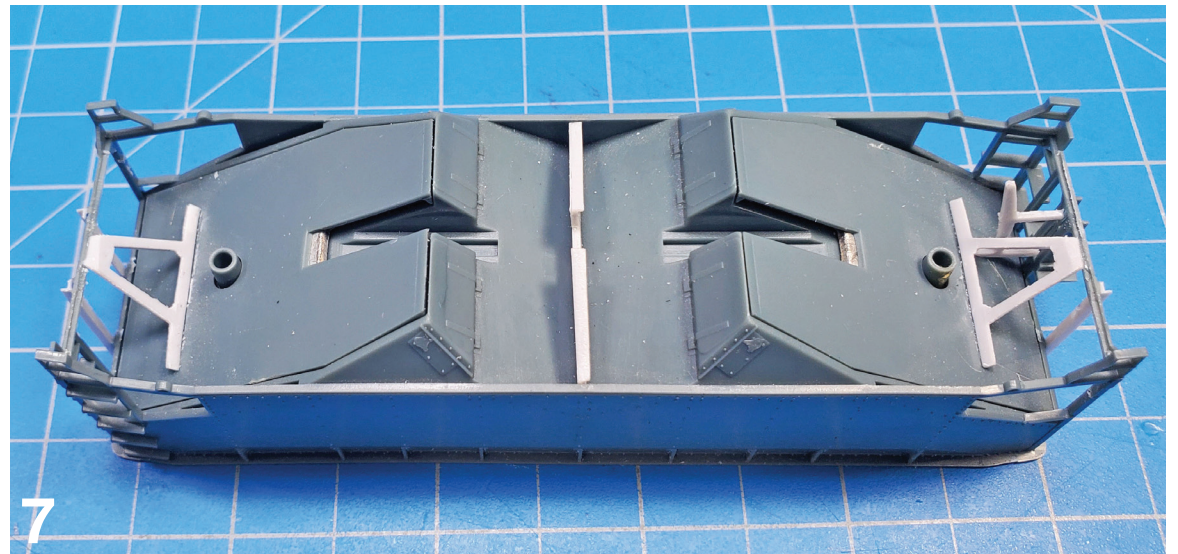
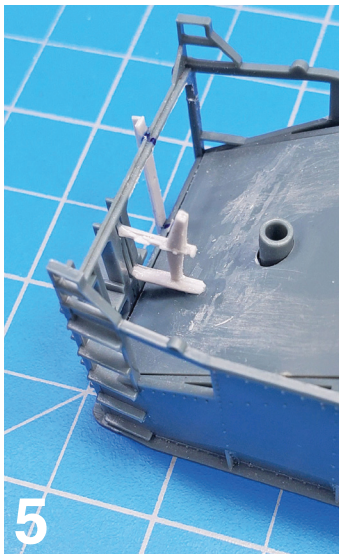




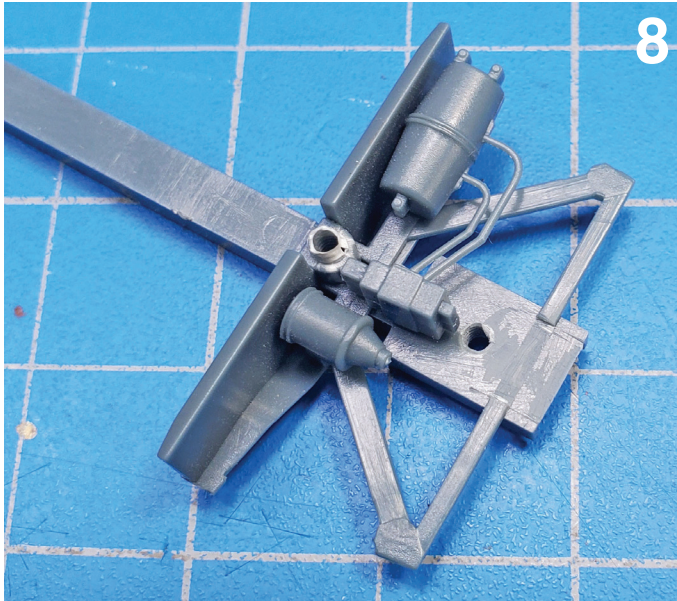


**Photos 5 and 6:** File a slight angle on the notched end of the brake clevis bracket and attach the brake clevis with its bracket behind the brake housing and step.

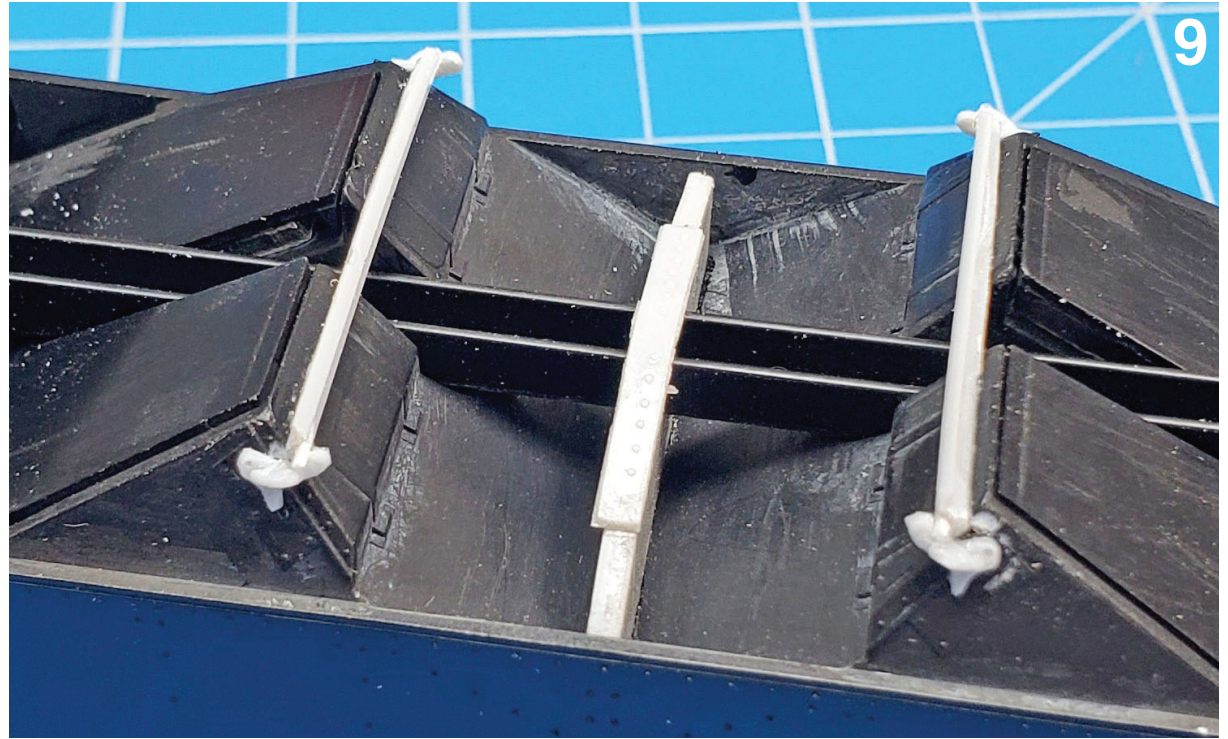
**Photo 7:** Attached the slope sheet supports and center crossbearer to the car bottom, making sure that the crossbearer is centered and clears the center sill.







**Photo 8:** File a notch in the underframe on top of the coupler boxes to clear the slope sheet supports.



**Photos 9 and 10:** First drill and tap the bolsters and coupler boxes for 2-56 screws. Attach the underframe to the car making sure that the brake clevis is located correctly. Attach the cover plate to the crossbearer.

Install the correct hopper door latches for the car being modeled. The C&EI cars received the Enterprise Unit door latches (shown in photos 11, 13 [bottom], 14). Note that there is a right and left latch. The MP cars were equipped with Wine latches (shown in photos 9, 10, 13 [top]). The Wine latch bars are longer than they need to be. After installation of the latches on the hopper side, trim them to fit.

