



# Getting Started with Resin Kits

Paul Harms

# The Most Common Reasons for Building Resin Kits:

- Create a car not otherwise available in the RTR market
- Create a car that is more realistic than is otherwise available

When others see your models, they aren't looking at the same Athearn or Accurail cars





**Are you a collector,  
operator, or both?**

Does your modeling and/ or layout  
exist at a certain point in time and  
space?

The more focused you are, the less  
likely it is that you will make impulse  
purchases for items that will just stay in  
the box.



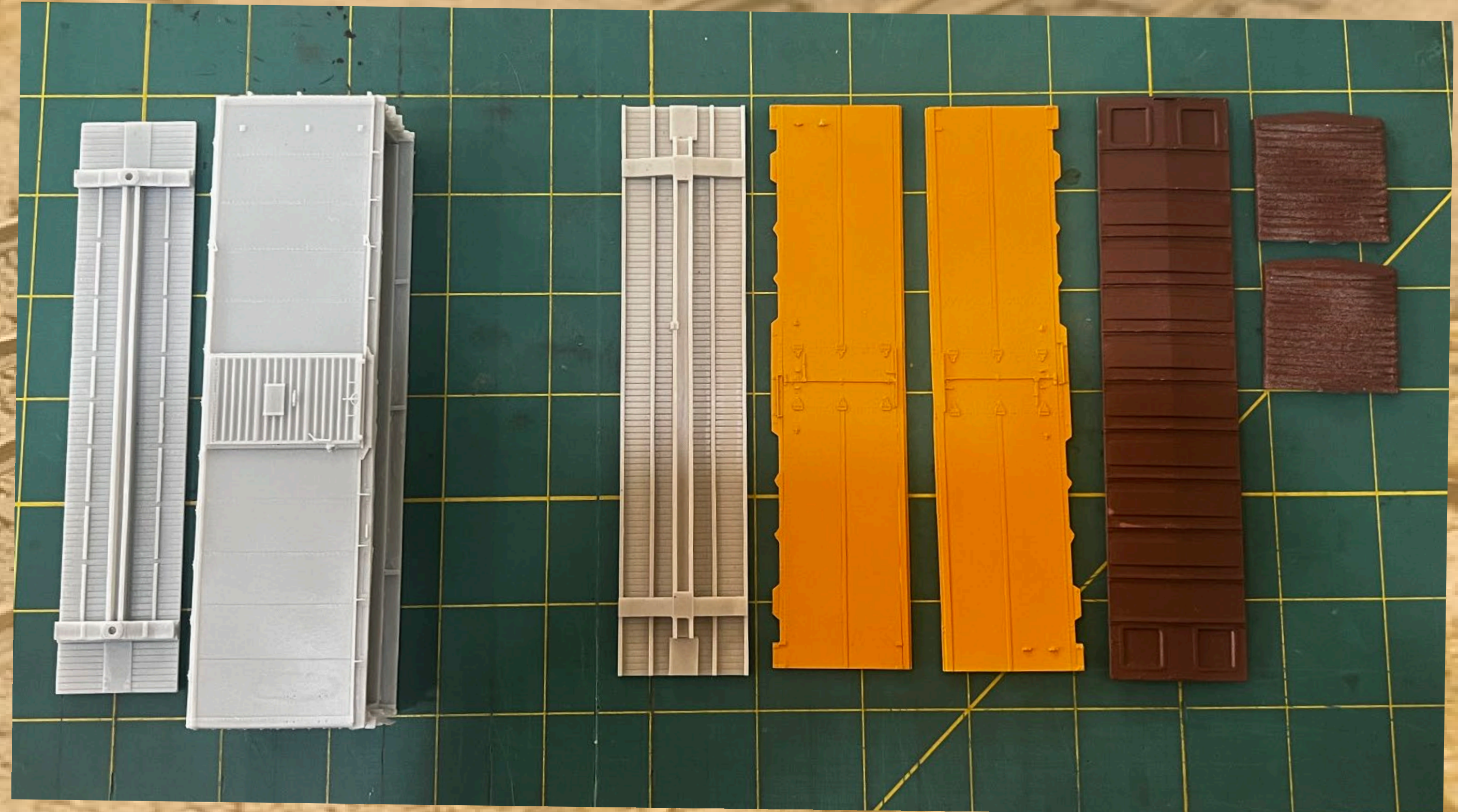
Most resin kit builders have focused on early transition era rolling stock

- Yarmouth Model Works has a few later options
- Westerfield has a plethora of steam era kits

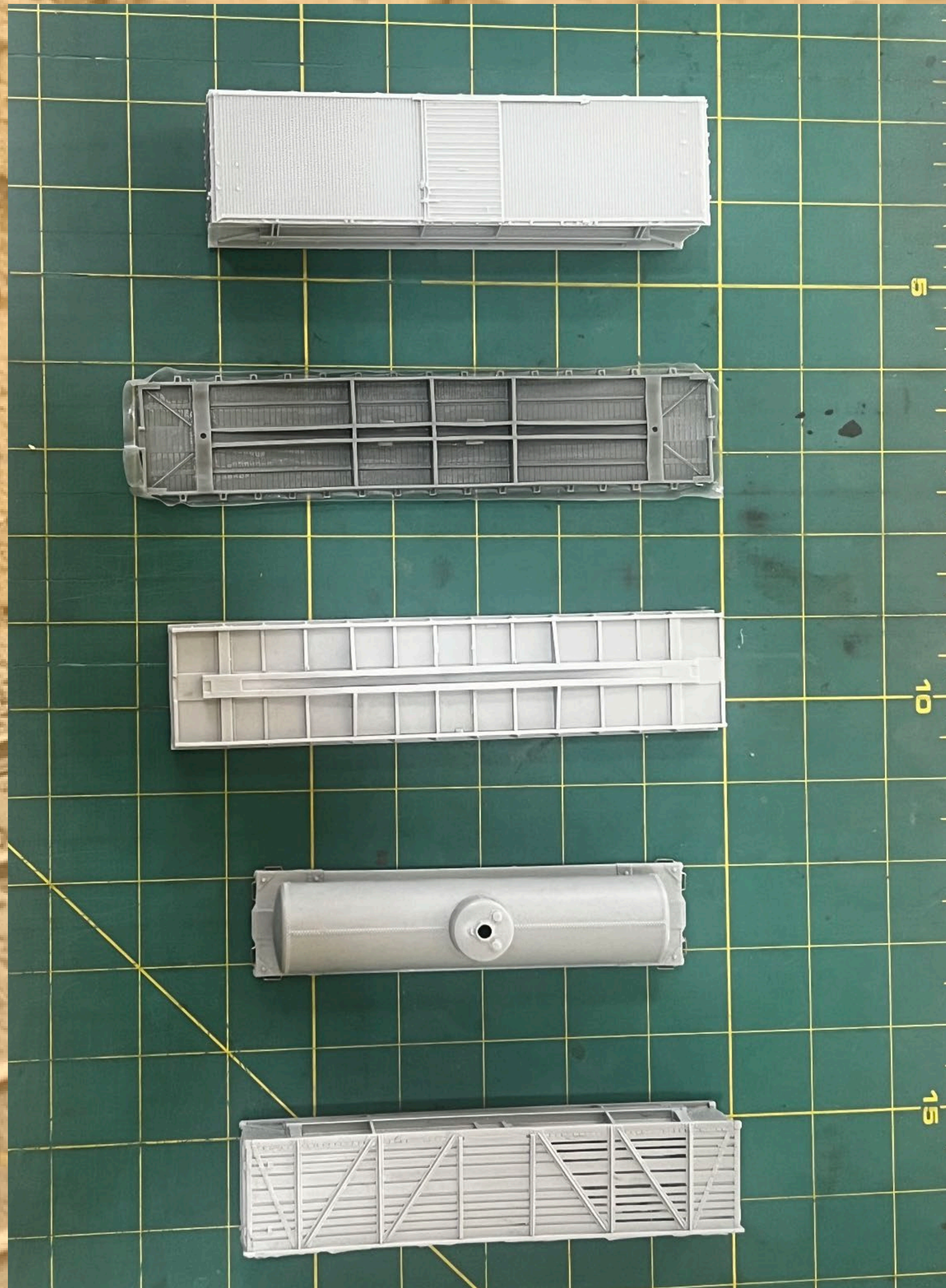
**some individuals that have put out some random modern era stock, but no**

# Two Basic Types of Car Construction:

1. Flat kits that need mostly (if not all) of the pieces assembled to create the body
  - So named because all the resin body pieces are flat when they are created
2. "One piece"
  - A much faster type of construction where the body is substantially built so that the modeler can focus on the detailing, painting, decaling, etc.
  - Usually the underbody/ floor is separate, but occasionally, the roof might be separate



# Types of Rolling Stock Widely Available from Many of the Manufactures:



## 1. Box Car/ Reefers:

- Most common
- Most beginners start here
- When adding weight or using internal bracing, is easy to do so

## 2. Flat Cars

- Most are an easy build for beginners
- Getting proper weighting can be a challenge

## 3. Gondolas

- Flat kits are more difficult than boxcar flat kits
- Can be a challenge for beginners because there is no way to hide any bracing
- But “one piece bodies” are excellent for beginners

## 4. Tank Cars:

- Only for more advanced modelers
- No real distinctions between “flat kits” and “one piece bodies”

## 5. Others (Not for Beginners):

- Stock cars (tedious)
- Vinegar cars
- Cabooses
- Open or covered hoppers

A photograph of a railway track in a dry, arid landscape. The tracks are made of metal rails on wooden sleepers, set on a bed of gravel. The ground is sandy and cracked, with sparse, dry vegetation. A semi-transparent yellow rectangular box is overlaid across the middle of the image, containing the text "What kit maker to choose?".

**What kit maker to choose?**

# 1) Sunshine

- Large and varied selection
- Overall most sought after due to choices and fidelity to prototype
  - Also, most expensive overall
- Early kits (1-20) tend to cost less, but that is because they were not as well designed
  - Avoid these until you get a few kits under your belt
- Since all of these are aftermarket sources (Ebay, trains shows, etc.), you take possession quickly
- A group of hobbyists have posted all of the Prototype Data Sheets (PDS) at:  
<https://web.archive.org/web/20190323235903/http://www.sunshinekits.com/flyersbyroad.html>



## 2) Westerfield

- Good selection of earlier era cars
- Largest selection of boxcars
- Good beginner starting point
  - Instructions are so thorough that some people think they are a little overwhelming
- Avoid very early flat kits that had the dark grey resin
  - It is brittle and will also wear down your drill bits
- Later flat kits with light grey resin are fine and most recent kits are now single piece bodies
- They are also usually the best source for Tahoe Model Works trucks
- Great customer service and kits are run in batches, so wait time varies wildly

<http://www.westerfieldmodels.com>

\$40-\$55

## 3) Yarmouth Model Works

- My personal favorite
- Well-detailed and designed kits (all one piece bodies)
- Leader in etched metal parts and laser cut running boards
- Mostly a great beginner, all-around starting point
  - Although their cars with Duryea under frames can be “fiddly”
- Instructions sometimes have built-in assumptions, but do include good pictures for reference
- Good customer service from this full-time business owner and some of his “how to” videos can occasionally be found online
- Kits are limited run and ship from Canada, so they sometimes can take a couple of weeks

<https://www.yarmouthmodelworks.com/>

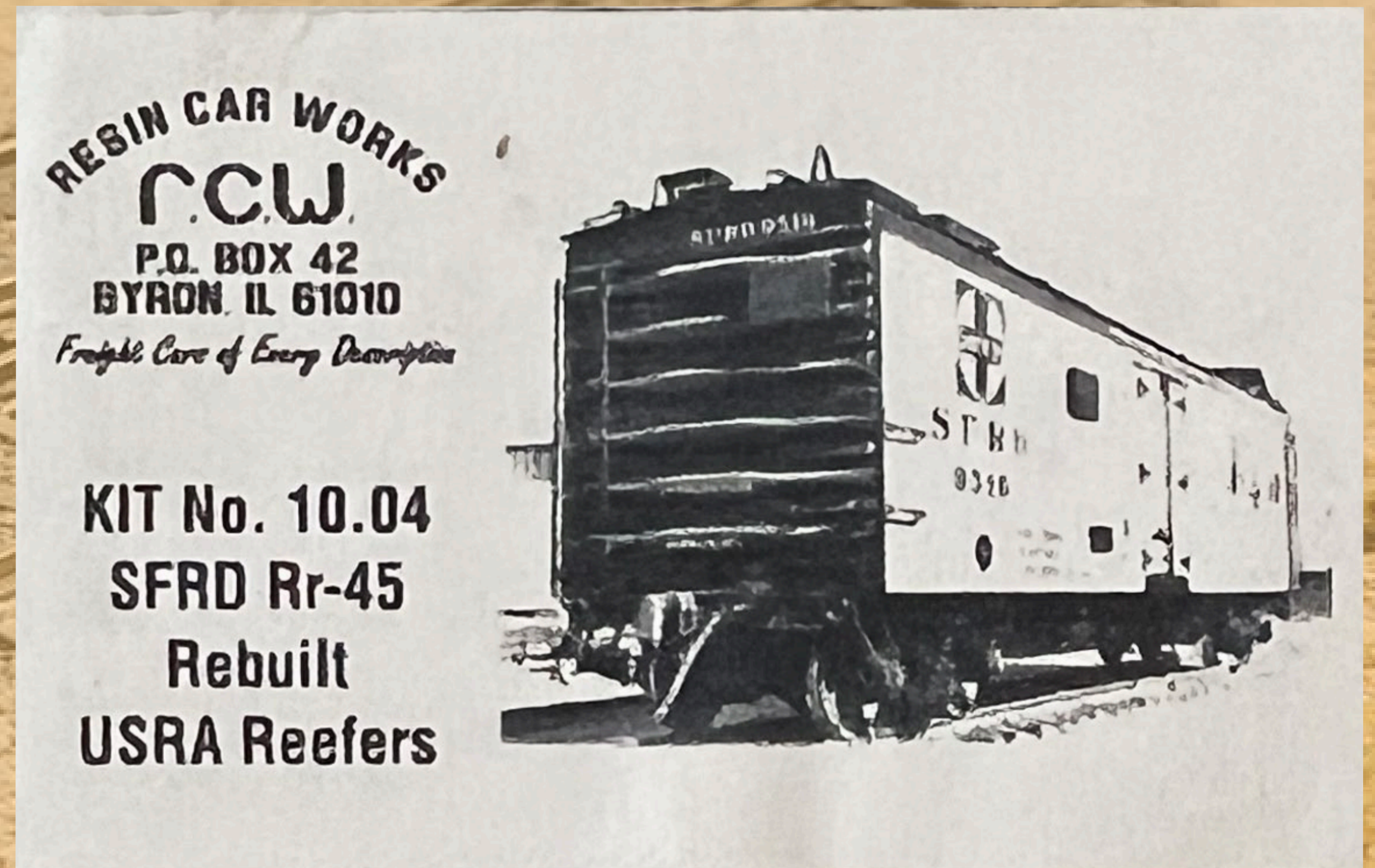
\$60-\$65

# 4) Resin Car Works

- Not a full time business, but a group of kit builders that got together to break even on their hobby
- Nice people, but customer service is hit and miss (about which they are honest) and wait times can be weeks
- BUT, they have an excellent product and website, including online instructions and pictures
- Most kits are designed by Frank Hodina who designed most of the original masters for Sunshine
- Good beginner starting point, but selection and runs are limited
  - As a result, third party resales tend to be pricey

<http://www.resincarworks.com>

\$40-\$65



## 5) Speedwitch Media

- A business run by Ted Culotta
  - One of the most respected railroad historians on the planet (also has LOTS of reference materials for sale on his site)
  - He just reentered the market after an absence of several years
- Kit output falls into two categories: pre-2020 (Ebay) and current (website)
- He changed his approach with his restarted company and is aiming to have the most detailed offerings on the market
- Has all one piece bodies with excellent detail and accuracy
- Trying to outdo Yarmouth and Resin Car Works (even though they are all friends) with his etched metal parts, but this comes at a price
- His new kits start at \$85
- I ordered one and am waiting on delivery
  - I will get back to you on the verity
- Not a good place for a beginner to buy from



*New York  
New Haven  
and Hartford*

**Kit 102.1 New Haven Railroad 17200  
series Welded Flat Car - HO**

**SPEEDWITCH MEDIA**

645 Tanner Marsh Road, Guilford, CT 06437

info@speedwitch.com • (203) 453-6174

## 6) Funaro & Camerlengo

- Good entry level price point, but instructions can be a challenge
- For a full-time business, you should expect better customer service
- Detail parts are iffy
- Decals are hit and miss, but National Scale Car (aftermarket) has stepped up to address this
- On one hand, a bad kit might discourage the beginner
- Kits are \$35-\$45 on their website
  - Can sometimes be found for less (\$25?) on Ebay and at certain Midwest and Northeast train shows

**FUNARO & CAMERLENGO**

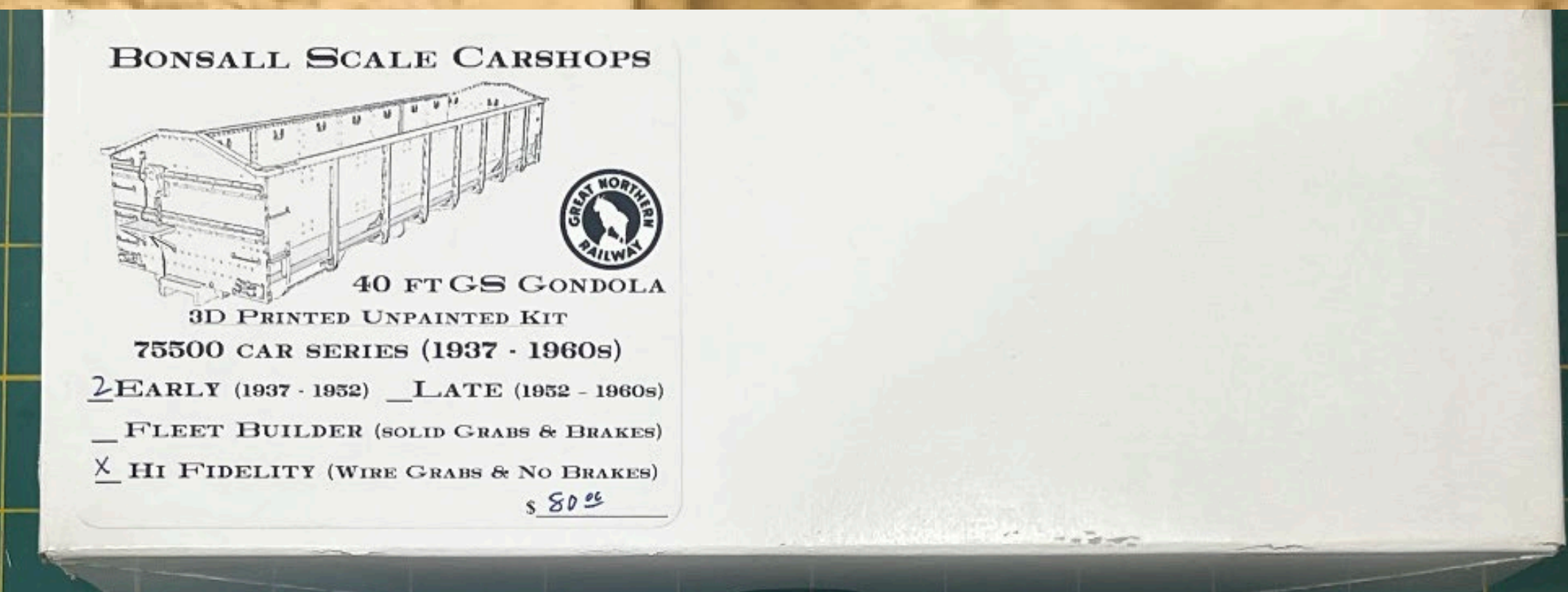
**8300 PRR  
K8 Stockcar  
ONE PIECE  
BODY Single  
Deck with  
AB Brake &  
Decals**



**HO Scale  
Resin Kit**

**10 Funaro Court, Honesdale, PA 18431** **Made In U.S.A.**

Craftsman Kit Not Intended for Children Under The Age of 14



## 7) Southbound Model Works

- Only sporadic production
- Makes good kits, but expect LONG waits, limited choices

## 8) Southern Car & Foundry

- They only have one type of car still showing in stock on their website, but they do have some of the better tank cars out there

## 9) Dennis Storzek

- Out of production, hard to find

## 10) Bonsall Car Works

- Easy to build, but limited selection, intermittent releases
- Tends toward very accurate gondolas, but are difficult to add weight to

## 11) Sylvan

- More focused on Canadian and Great Lakes area models
- If you can get past their limited decal selection (which limits CP and CN eras), they are good kits

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- Gondolas: flat kits are more difficult than boxcar flat kits and can be a challenge for a beginner, but “one piece bodies” are excellent for beginners
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# Reference Materials

These have valuable information, both in text and picture form, about the various details that existed on freight cars:

- Car numbers
- Painting and lettering
- Running boards
- Stirrups
- Ends
- Roofs
- Underframes
- Trucks
- Brake wheels
- Grabs or ladders
- Etc



# Online Reference Materials

<http://www.steamerafreightcars.com>

This site includes accurate information about almost every railroad's iteration of 1932, 1937, modified, post war, etc. boxcars and what details they were made with. This info is in the form of a spread sheet.

## **Essential Freight Cars**

Various places online, by Ted Culotta

## **Railway Prototype Cyclopedias**

(1-35 various, print only)

When you want to do a DEEP dive on certain prototypes

## **Sunshine Kit List Archive Pages:**

<https://web.archive.org/web/20190323235903/http://www.sunshinekits.com/flyersbyroad.html>

## **Various Railroad Historical Societies**

### **Facebook Group: "Resin Railroad Modelers"**

Pretty easy going, good responses to "help wanted" inquiries

### **Yahoo Blog Groups**

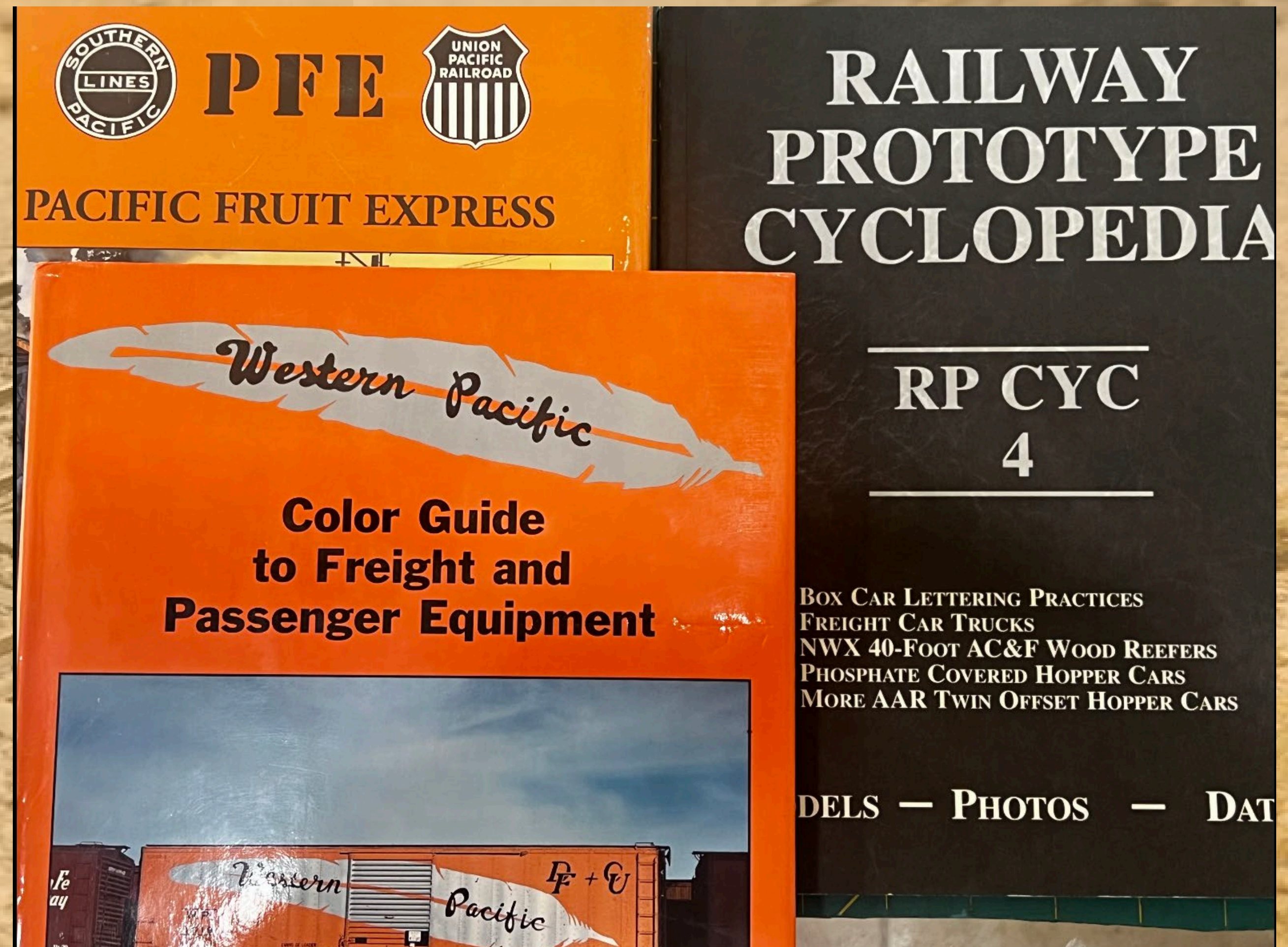
Far more hardcore, AND also far more knowledgeable than the FB group (there IS some overlap)

Some of the best modeling I have ever seen is done here

There are a couple men that tend to be prima donnas and get critical of anyone not up to their standards, but the group admins have really clamped down on that in the last few years

# Books/ Print Reference Material

- Railway Prototype Cyclopedias (1-35 various) (print only)
- Books that focus on certain rolling stock of the larger railroads
  - PFE by Tony Thompson
  - SP books by Tony Thompson
  - ATSF books by Richard Hendrickson
  - Etc.
- Color Guide to Freight and Passenger Equipment
  - Many choices, each book will focus on one railroad
- Books that focus on different TYPES of cars:
  - Focus on Freight Cars (vol 1-10) by Ted Culotta/ Speedwitch Media
  - Steam Era Freight Cars Reference Manual (vol 1-3) by Ted Culotta



# Tools/ Supplies for Assembly

- ESSENTIALS:

- Hobby tweezers
- Medium AC
- #11 knife
- #2-56 tap & drill set (Kadee item #246)
- Mini drills and drill vise

- TOOLS/ SUPPLIES FOR FINISHING:

- Primer & paint
- Airbrush (instead of spray can)

- HELPFUL OPTIONALS:

- Canopy glue (Pacer formula 560)
- Cutting mat
- The chopper
- Yarmouth Model Works ladder template
- Etched metal bender
- Optivisor
- A-line weights
- Liquid Gravity (kind of like B.Bs, for adding weight)

If buying a kit from a 3rd party (not from the manufacturer), check the parts before starting

# Aftermarket Detail Parts (Partial List):

- Details West (many, beaker gear)
- Details Associates (many)
- Yarmouth Model Works (many, good website)
- Precision Scale (many)
- Plano (running boards)
- Tichy (wire and grabs)
- Kadee (best bracket grabs on market, get Yarmouth drilling template)
- Tahoe Model Works (trucks, best place is Westerfield site)

# BASICS to Starting a Build:

Wash parts in warm water with a drop of dish soap, a toothbrush doesn't hurt. Clean flash off parts as needed with #11 knife and high grit sanding sticks. Sometimes parts are warped. There are a couple of tricks for flattening (but that's for another time)

- Flat Kit Only:
  - Check sides and ends to be sure that they are equal in their dimensions
  - Test fit floor or roof for the body, do minor filing if needed
  - Fasten all piece together (including trucks and couplers) and weigh them
  - Add needed weight to get to NMRA recommendation (1/2 oz per inch, + 1 oz)
- On boxcars/ reefers, can use nuts and epoxy, various suppliers sell "stick-on" weights, but make sure that they will never come unstuck
- Flat cars, gondolas, and open hoppers will need more creativity in adding weight (bird shot, Liquid Gravity, flat metal, A-Line, Adair Shops)
- Don't even THINK about doing a tank car or stock car your first time

# BASICS to Starting a Build, con't:

- Assembly Body with AC:
  - Drill with 2-56 (Kadee drills) holes in bolster for truck screws
  - Test fit coupler boxes (supplied, or Kadee)
  - Drill hole when possible
  - Use combination of screw & AC
  - Temporarily install couplers and trucks
  - Check coupler height with Kadeem gauge
  - Shim if needed, then remove trucks and couplers (but leave the coupler boxes)
  - Install main under frame components (valve, reservoir, cylinder)
  - Add levers and piping
  - Most manufacturers supply a diagram that shows prototype arrangement