

Finding Kitbashing Opportunities in Freight Cars

Ted Culotta

Prototype Rails
Cocoa Beach, FL
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This will be posted to prototopics.blogspot.com

Finding Kitbashing Opportunities

Thank you

- Richard Hendrickson
- Stan Rydarowicz
- Mark Feddersen
- Clark Propst
- Bill Welch
- John Nehrich
- Jeff English
- Tony Thompson
- Ed Hawkins
- Pat Wider

Finding Kitbashing Opportunities

- Start with what you know, e.g. a car design, a road's specific cars, a type of specialty
- Ask questions or search for answers. Good resources are the various Yahoo! Groups lists, e.g. STMFC
- Learn more. Look for articles and reference material. Articles by Richard Hendrickson, Stan Rydarowicz, Clark Propst, and Mark Feddersen, to name a few
- Be observant

Finding Kitbashing Opportunities

- Look at and for photos, particularly at meets when Bob's, Mike Gruber, Jay Williams, etc., are present
- Check and reinforce what you know so that differences become apparent.
- Even the best miss things. When you go back to things you've looked at before and "look again for the first time" things that you missed become apparent

Finding Kitbashing Opportunities

- What follows is not meant to be a checklist of projects to do
- It is not meant to be a “how-to” for projects. You know best what works for you
- It is merely meant to highlight variety and inspire you to do the projects that interest you

Finding Kitbashing Opportunities

- Start small
- Develop your skills
- Move on to more difficult projects
- Attempt to incorporate a different challenge
 - paint or letter matching
 - airbrushing
 - working with a new material such as brass, resin, vinyl, even styrene
 - expanding technical capabilities such cutting and reassembling, filling and surface repair, bonding dissimilar materials, scratchbuilding details, etc.

Finding Kitbashing Opportunities

Tools & Supplies

- Calipers
- True Sander (Northwest ShortLine)
- The Chopper (Northwest ShortLine)
- A *GOOD* mitre box and saw
- RP Toolz punch and die (also Waldron)
- “Chiseling” blades
- Saw handle and blades from UMM-USA (not for the mitre box)

Finding Kitbashing Opportunities

Tools

- Go to UMM-USA, RP Toolz (http://www.rptoolz.com/?page_id=170) and look around
- Visit hyperscale.com regularly
- Learn!!!
- Buy cheap junk to learn to cut things up and reassemble them

The major source of inspiration....

MAINLINE

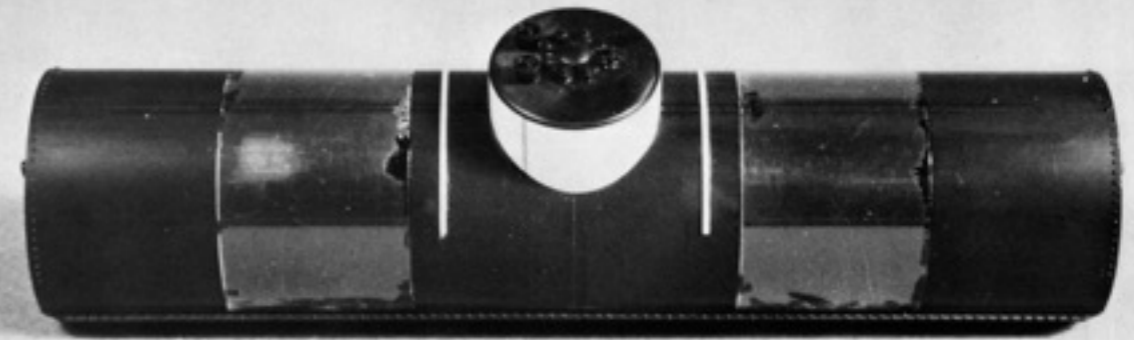
October 1985
MODELER

- SD45 • Frisco Hopper • Insulated Tank Car • Coffin System •
- Train Monitor • NP S-6 Detailing • TR2 Modeling • Fire Engine •



\$2.75

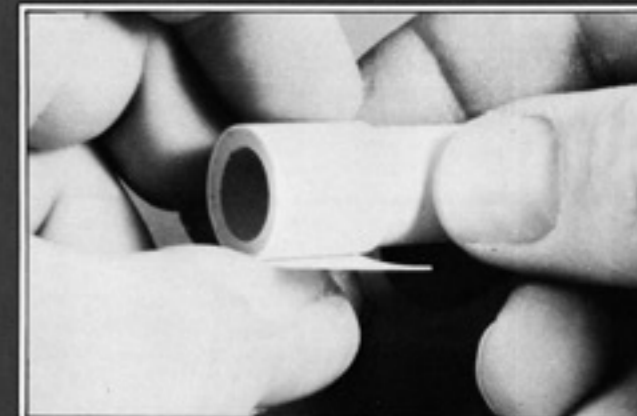
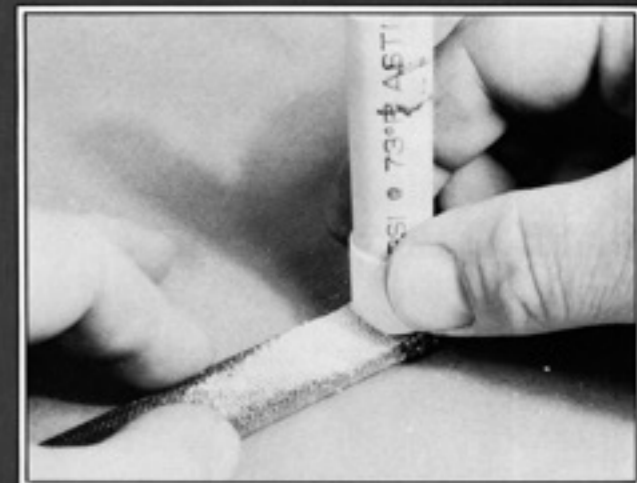
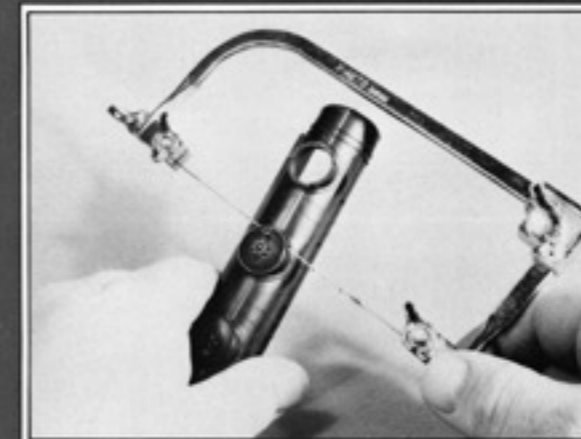
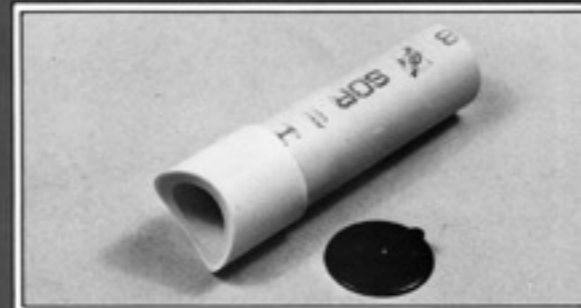
Higher in Canada



them arranged as before. To support these pieces, make an eight-foot-square frame from 2" x 2" styrene. My initial concern with this part of the project was how to assemble the platform and frame without ruining the delicate look by filling the mesh with solder or ACC. It finally dawned on me that I could use styrene solvent to soften the frame and then gently push the roofwalk material into the softened styrene. Because of the light weight of the material and the fact that

no load would be applied to the platform, it was not necessary to fasten each roofwalk piece to the adjoining piece. It could be done with ACC or solder, but I was not about to tempt fate, as Murphy's Law had already applied itself to this project several times. After the styrene had hardened, the platform proved to be quite durable.

Cornerposts were fabricated from 1" x 8" styrene. They are three feet in height and have a slight taper from bottom to top. A small bit of styrene was added to the top of these posts to provide a little extra support and also to create a lip to which the handrails could be fastened. Handrails were



Spotting Details



This photo is illustrative of type of things to look for...

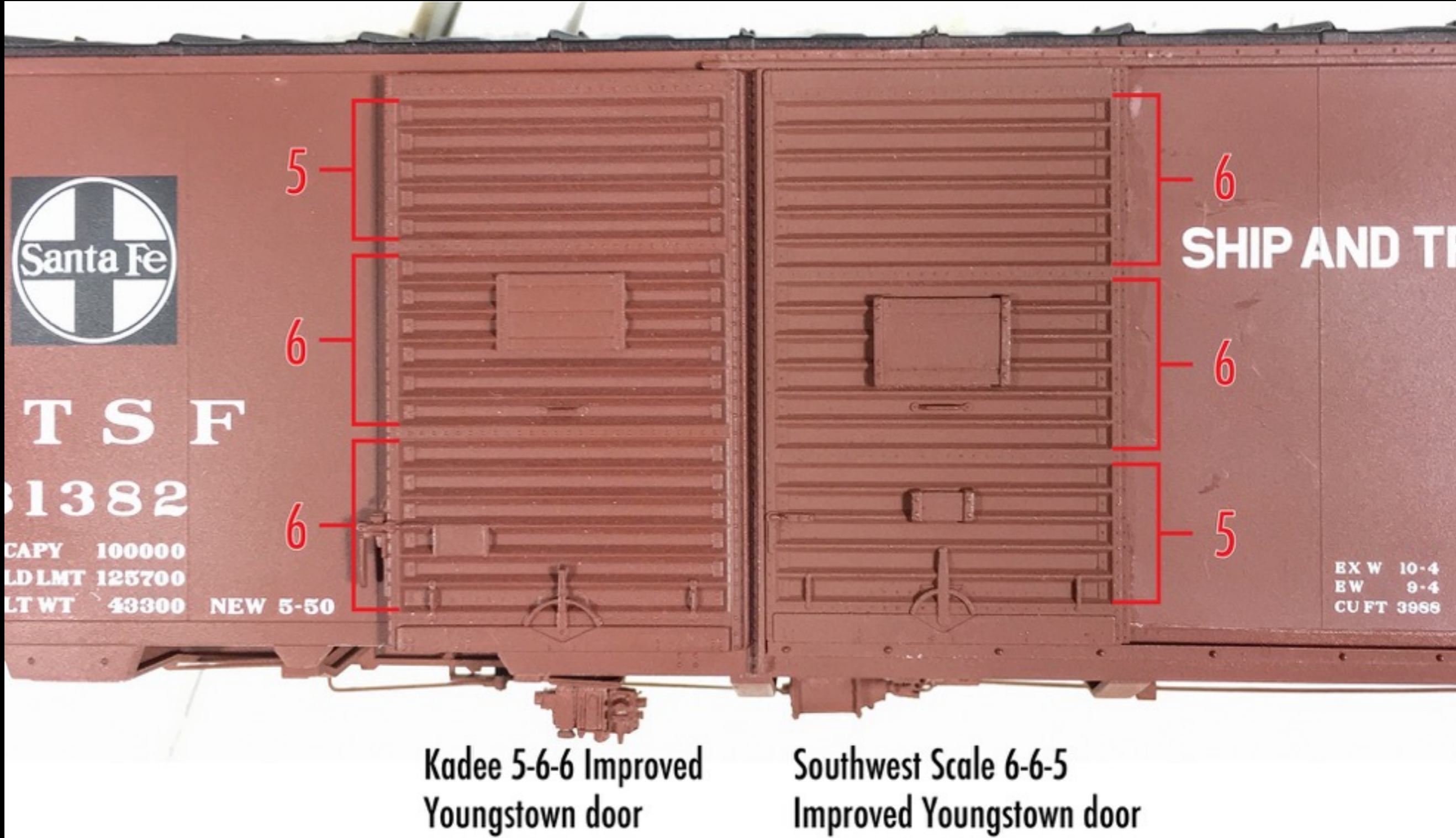
Spotting Details



Bolster channel tabs with 'bow-tie' rivet pattern and Royal Type F brake regulator... and, yes, National Type B trucks. This is an ideal "starting simple" project to tackle with an Intermountain kit



Kadee Santa Fe Bx-57 40' PS-1 Box Car
.....or starting simple
For full details on this model, visit
prototopics.blogspot.com and search: "Bx-57"



Kadee Santa Fe Bx-57 40' PS-1 Box Car



Kadee Santa Fe Bx-57 40' PS-1 Box Car
Matched Kadee color with Tamiya paints... 50%
red, 25% hull red, and 25% red brown



Kadee Santa Fe Bx-57 40' PS-1 Box Car
Also replaced original Apex Tri-Lok running board
with new U.S. Gypsum expanded metal version
from Kadee

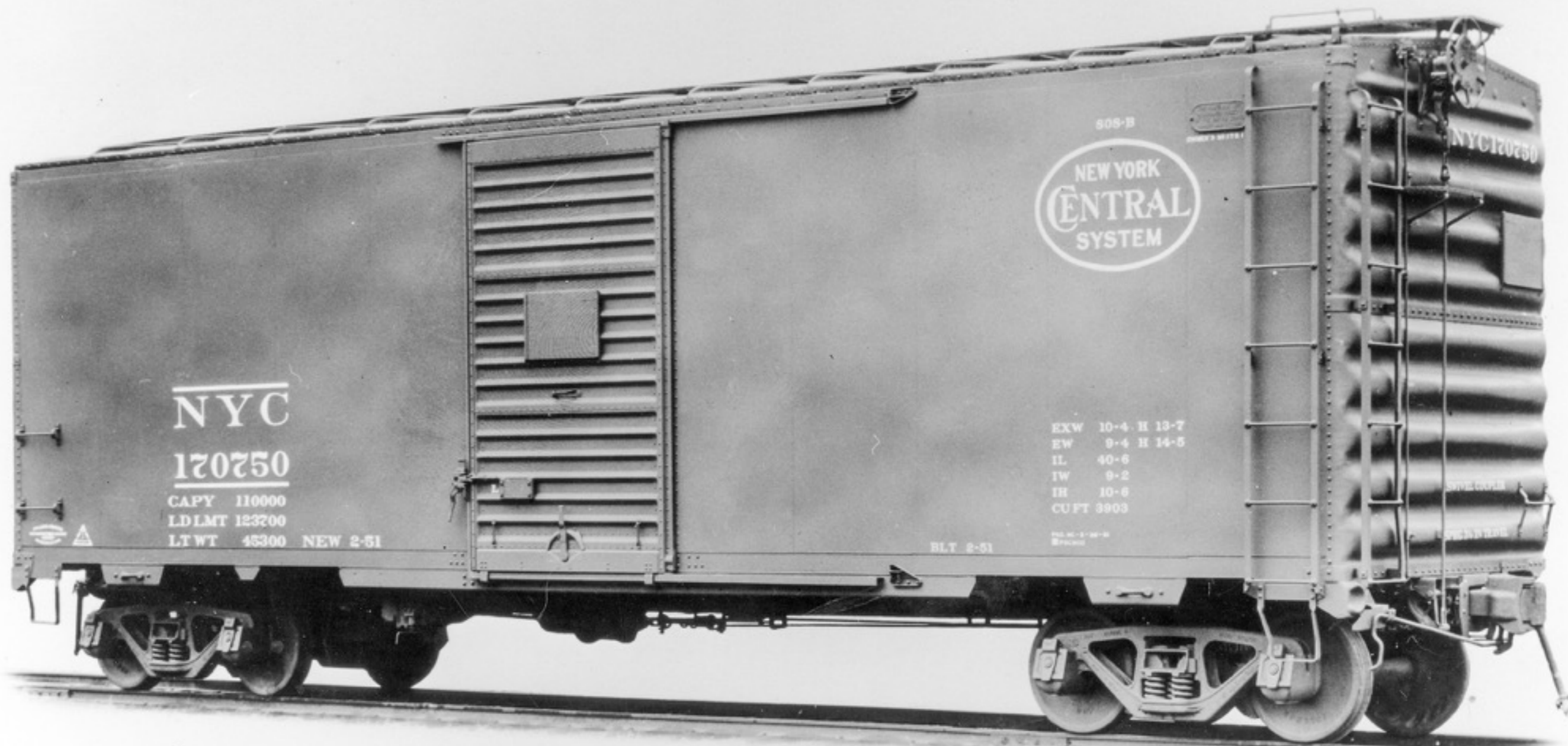


Lake Superior & Ishpeming 40' PS-1 Box Car

For full details on this model, visit prototopics.blogspot.com
and search: "Lake Superior PS-1"



New York Central 40' PS-1 Box Car
Same lot (5965 vs. 5965A for LS&I) and same specialties



NYCS Lot	Series	Qty	Built	P-S Lot No.	Door	Hand Brake	Running Board
798-B	169000-169749	750	1950	5965	7-panel Superior*	Universal	Apex Tri-Lok
	169750-170499	750			Improved Youngstown	Miner	
808-B	170500-170999	500	1951	5993	Improved Youngstown	Miner	Apex Tri-Lok
	171000-171499	500			7-panel Superior*	Universal	
817-B	171500-171999	500	1951	5997	7-panel Superior*	Miner	Apex Tri-Lok
	172000-172499	500			Improved Youngstown	Universal	

*wide third rib from top; NYCS style placard boards



Lake Superior & Ishpeming 40' PS-1 Box Car

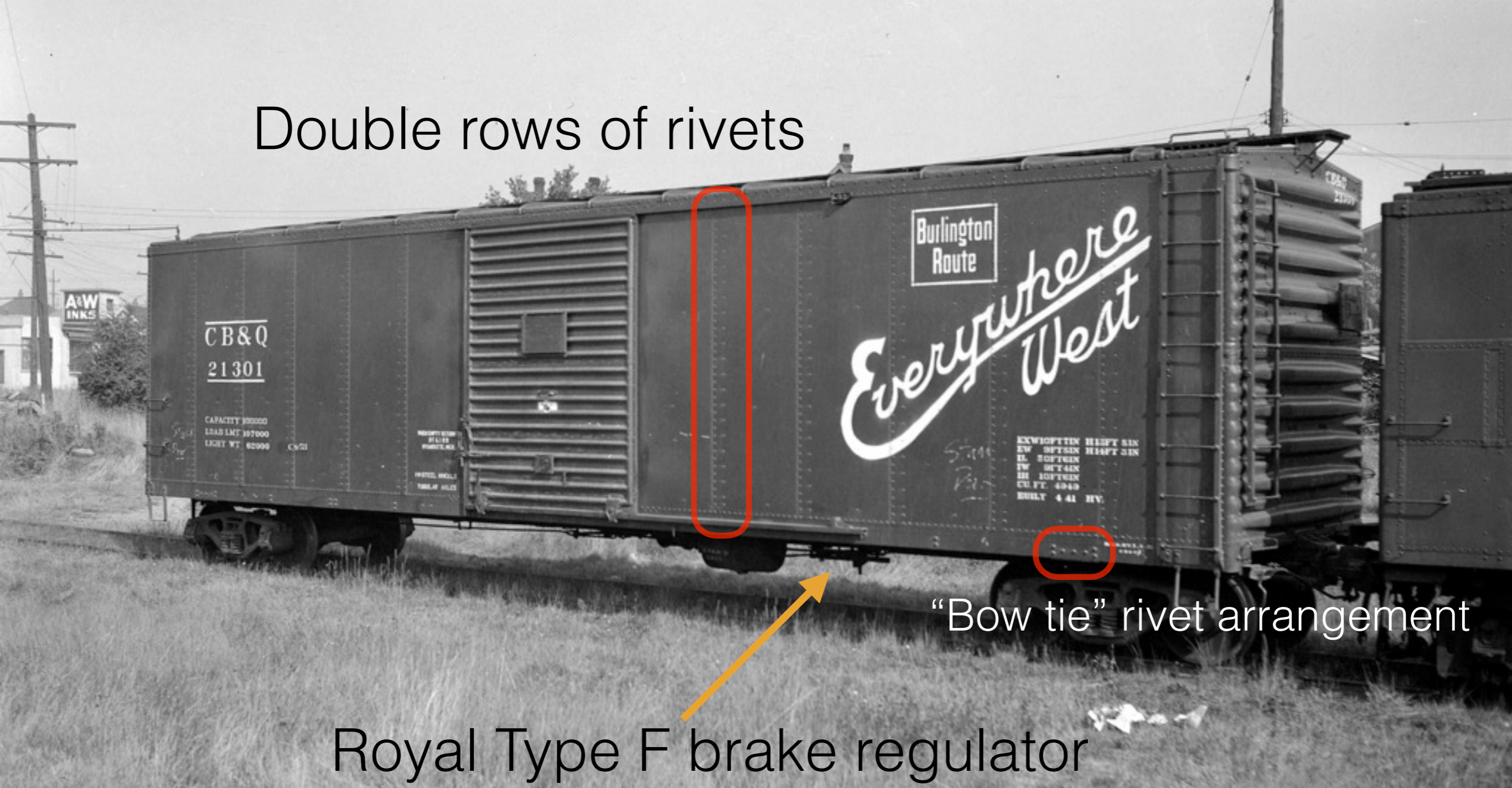


Lake Superior & Ishpeming 40' PS-1 Box Car



Lake Superior & Ishpeming 40' PS-1 Box Car

Double rows of rivets



“Bow tie” rivet arrangement

Royal Type F brake regulator

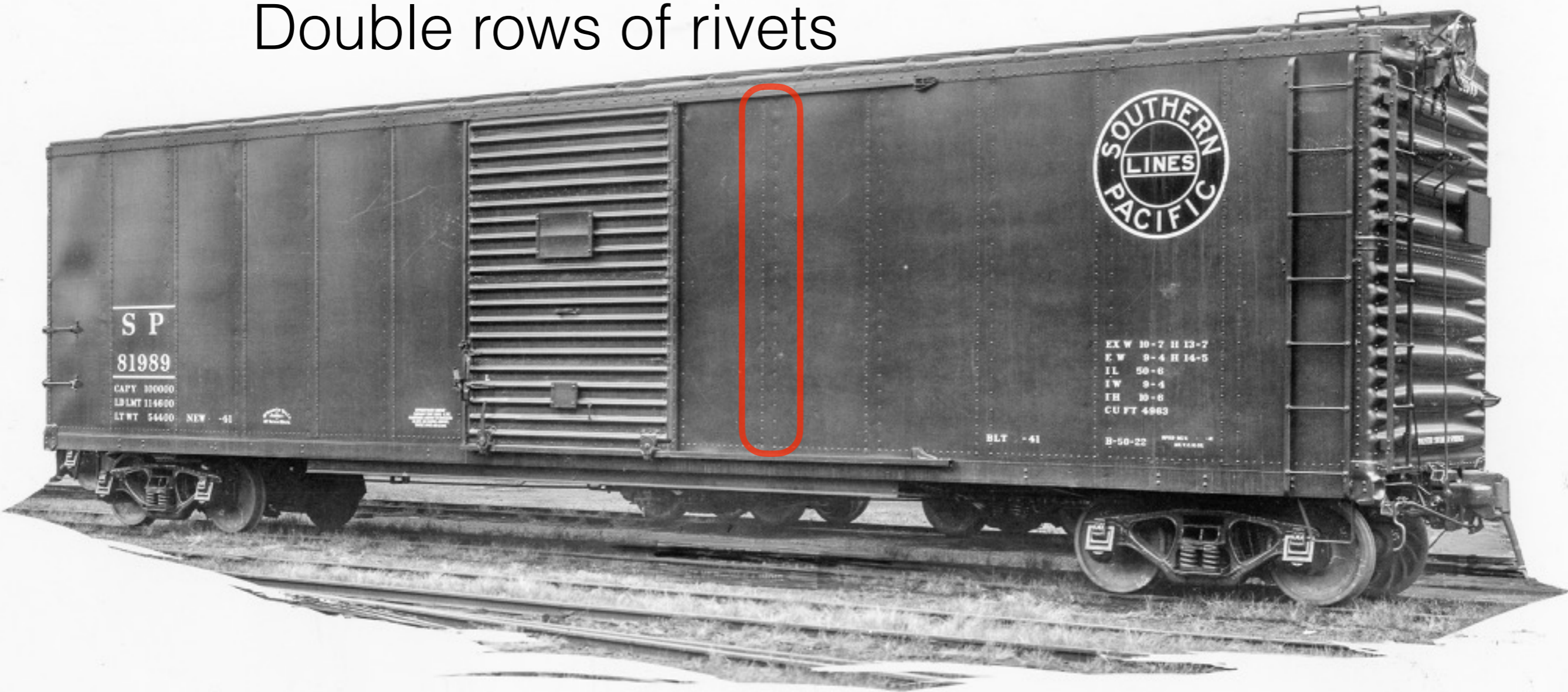
Burlington 50' AAR box car



Burlington 50' AAR box car

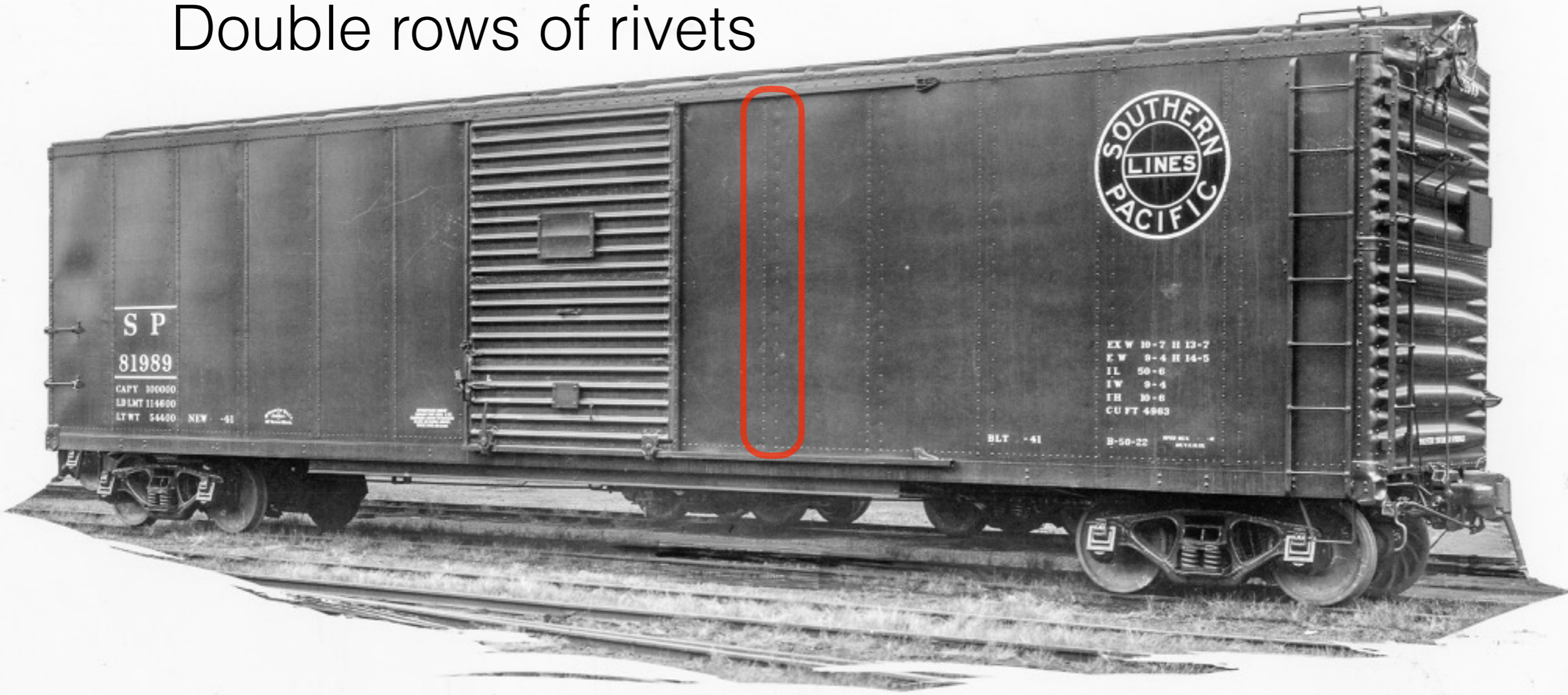
- Proto 2000 car
- “Clean” side and add Archer rivets (AR88110)
- Royal Type F Brake regulator ([Link to part on Shapeways](#))
- “Bow-tie” riveting at body bolsters
- Decals from Speedwitch

Double rows of rivets



Southern Pacific B-50-22 50' AAR box car

Double rows of rivets

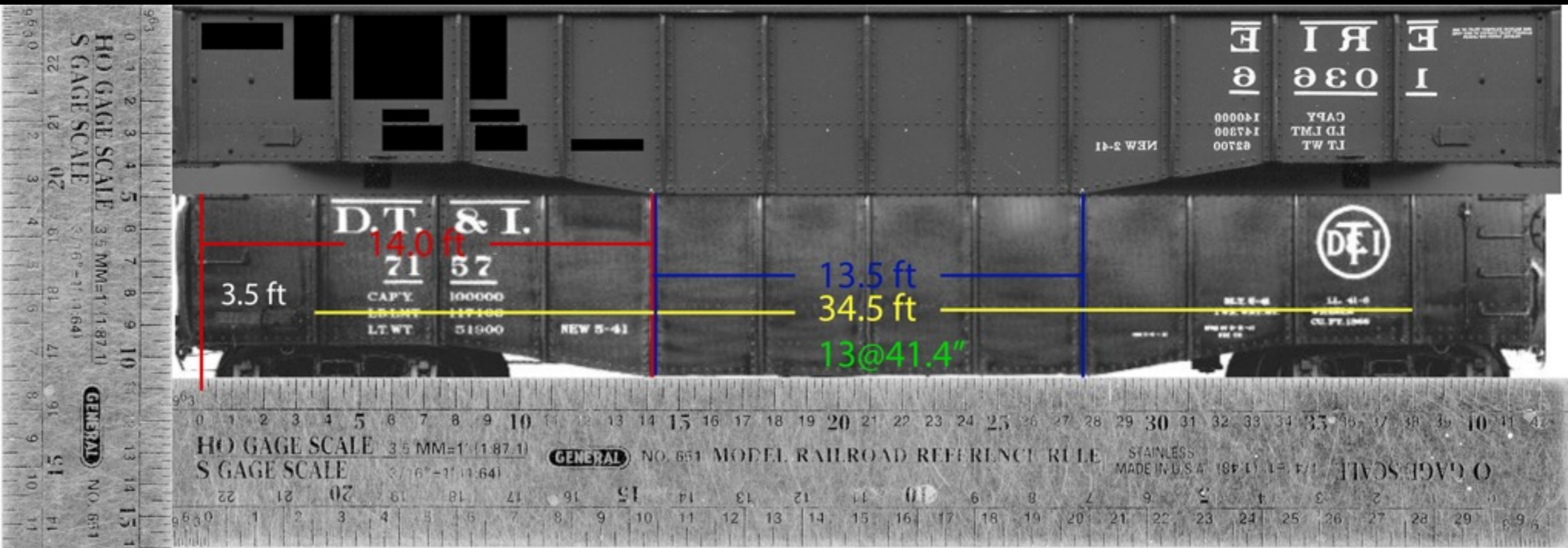


Southern Pacific B-50-22 50' AAR box car

- Proto 2000 car
- “Clean” side and add Archer rivets (AR88110)
- Side sill support under door
- True Line Trains Klasing power hand brake
- Decals... coming from Speedwitch

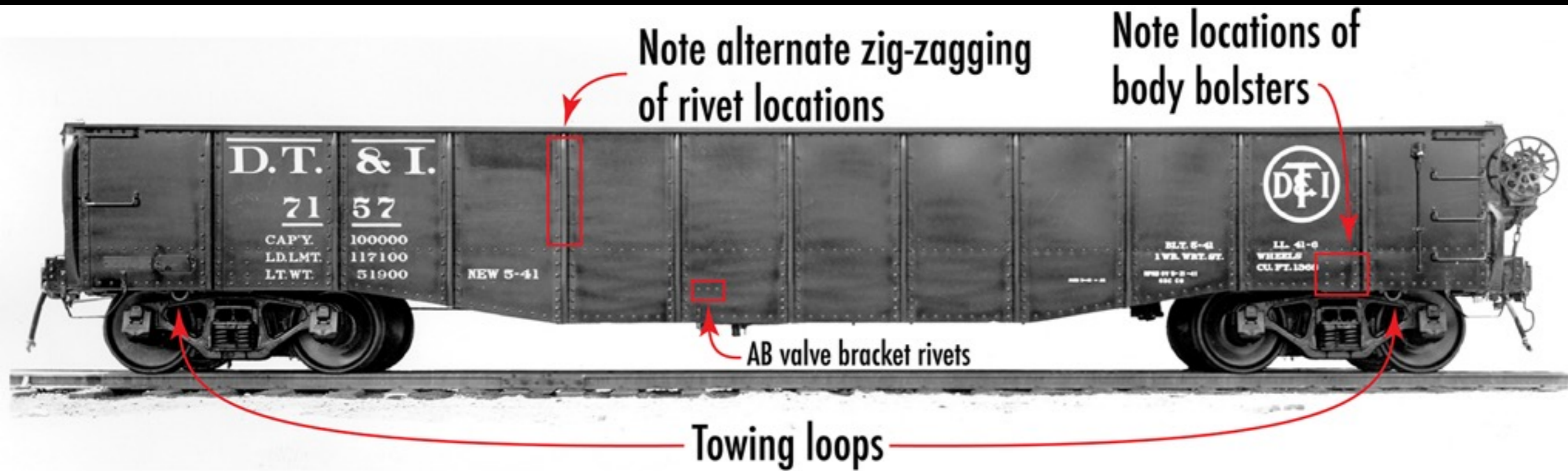


Detroit, Toledo & Ironton 41' Greenville Gondola



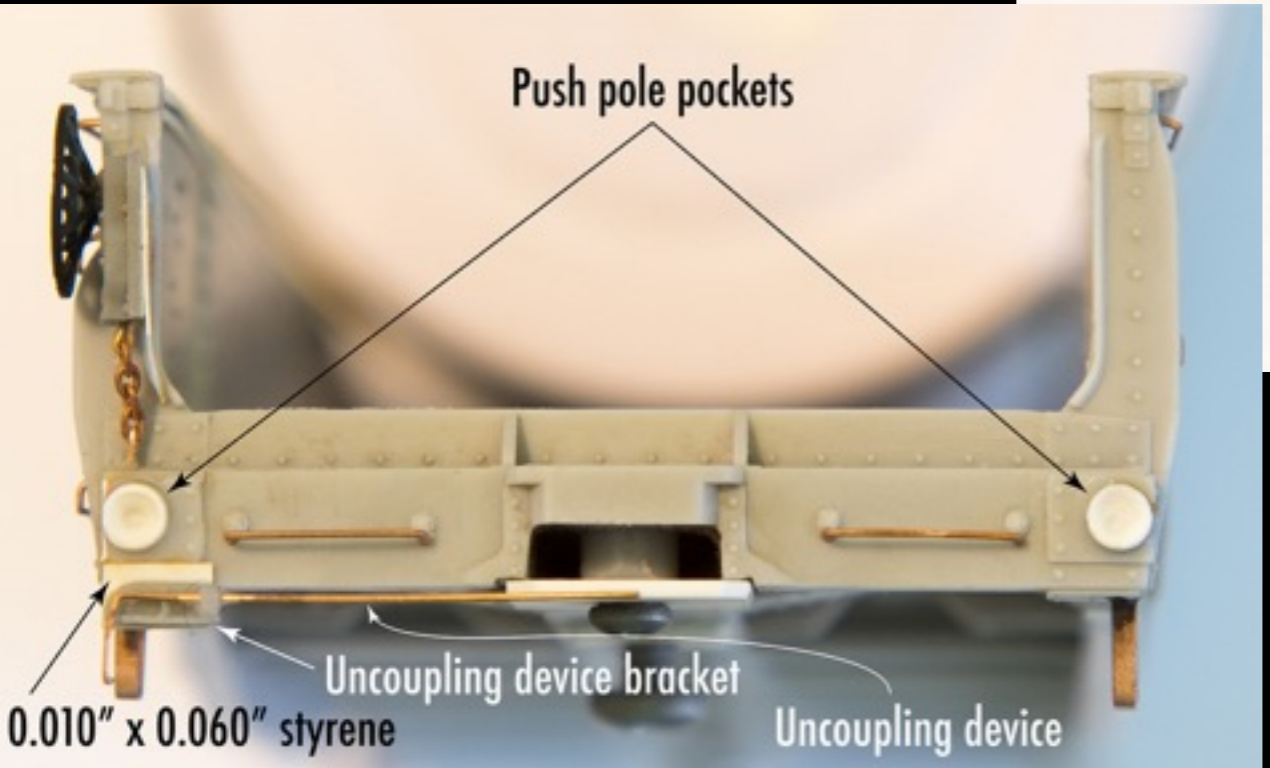
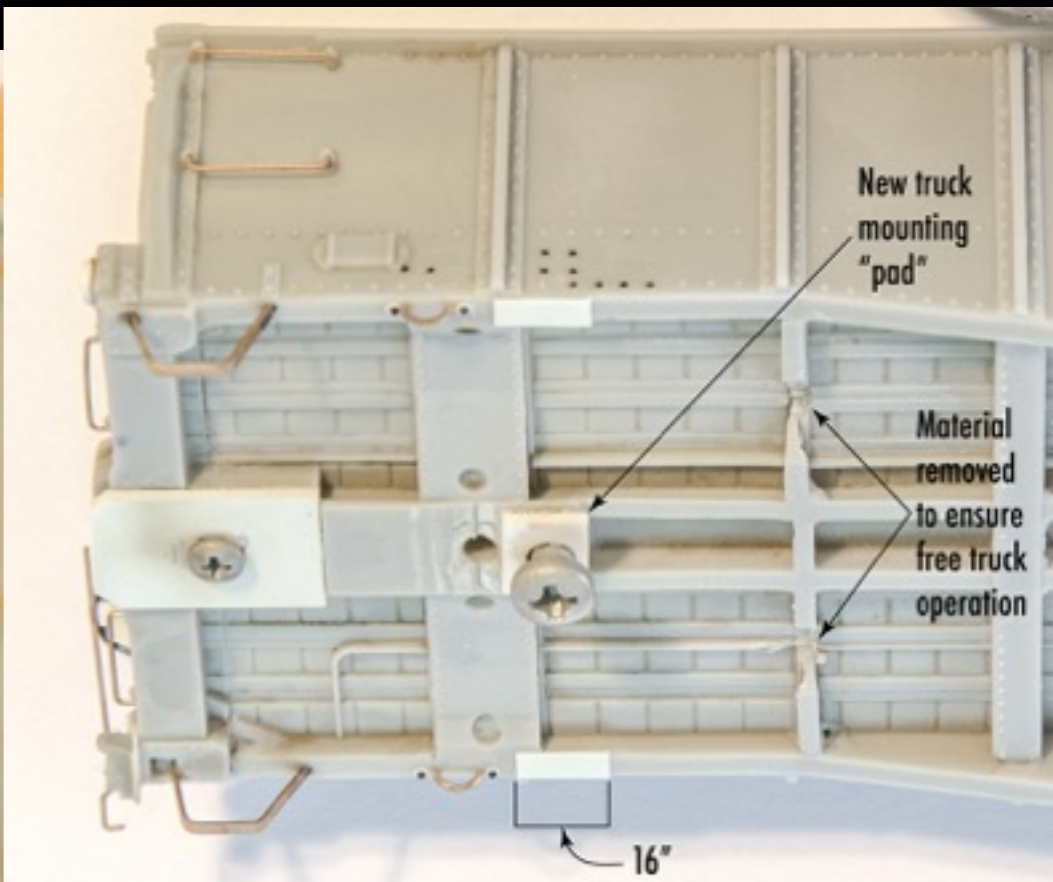
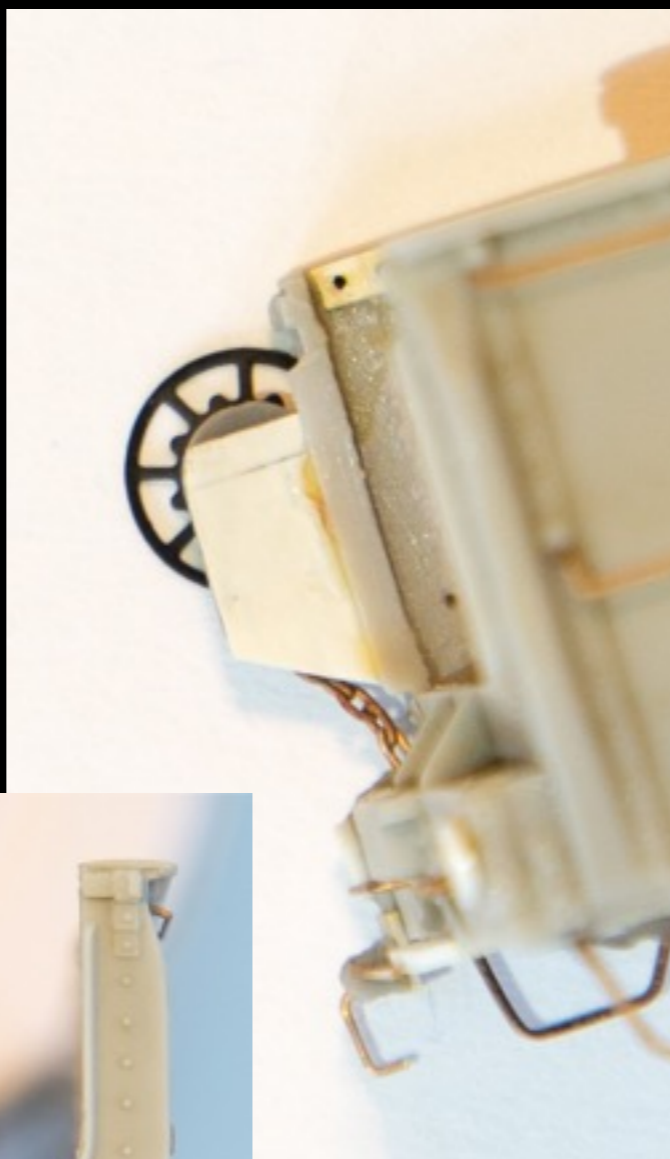
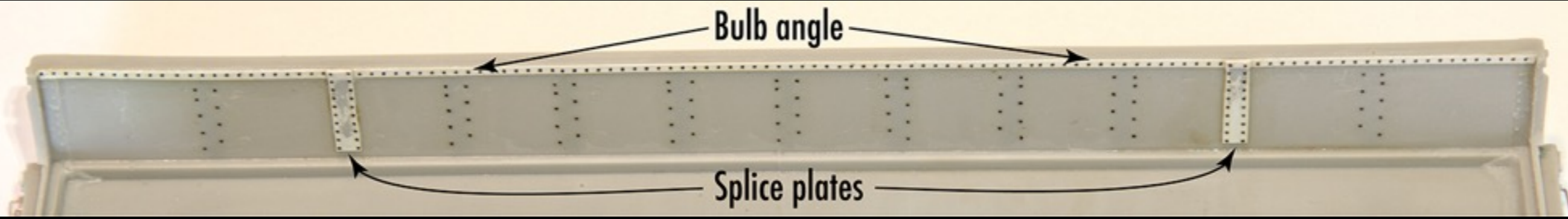
Detroit, Toledo & Ironton 41' Greenville Gondola

- Frank Hodina did this one in a weekend
- Tom Madden castings
- Speedwitch decals



Detroit, Toledo & Ironton 41' Greenville Gondola

Several detail differences from 52'6" Greenville gondola



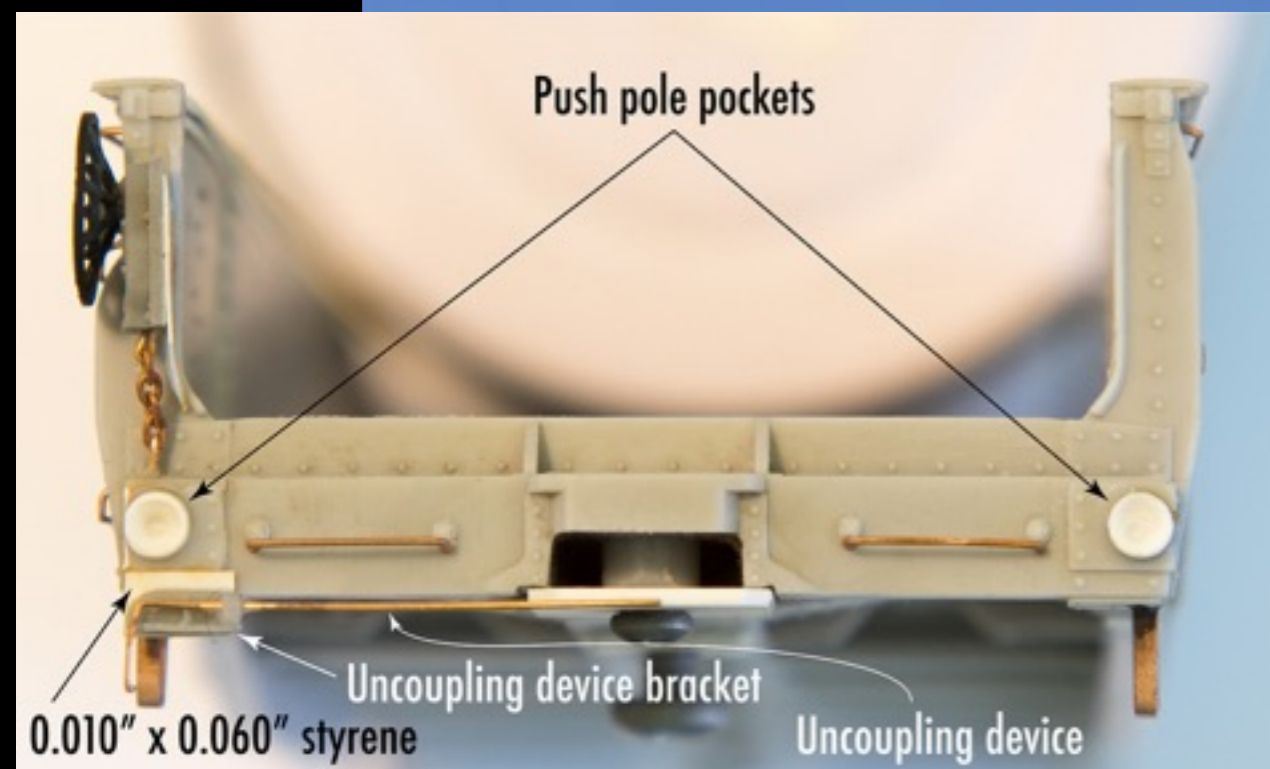
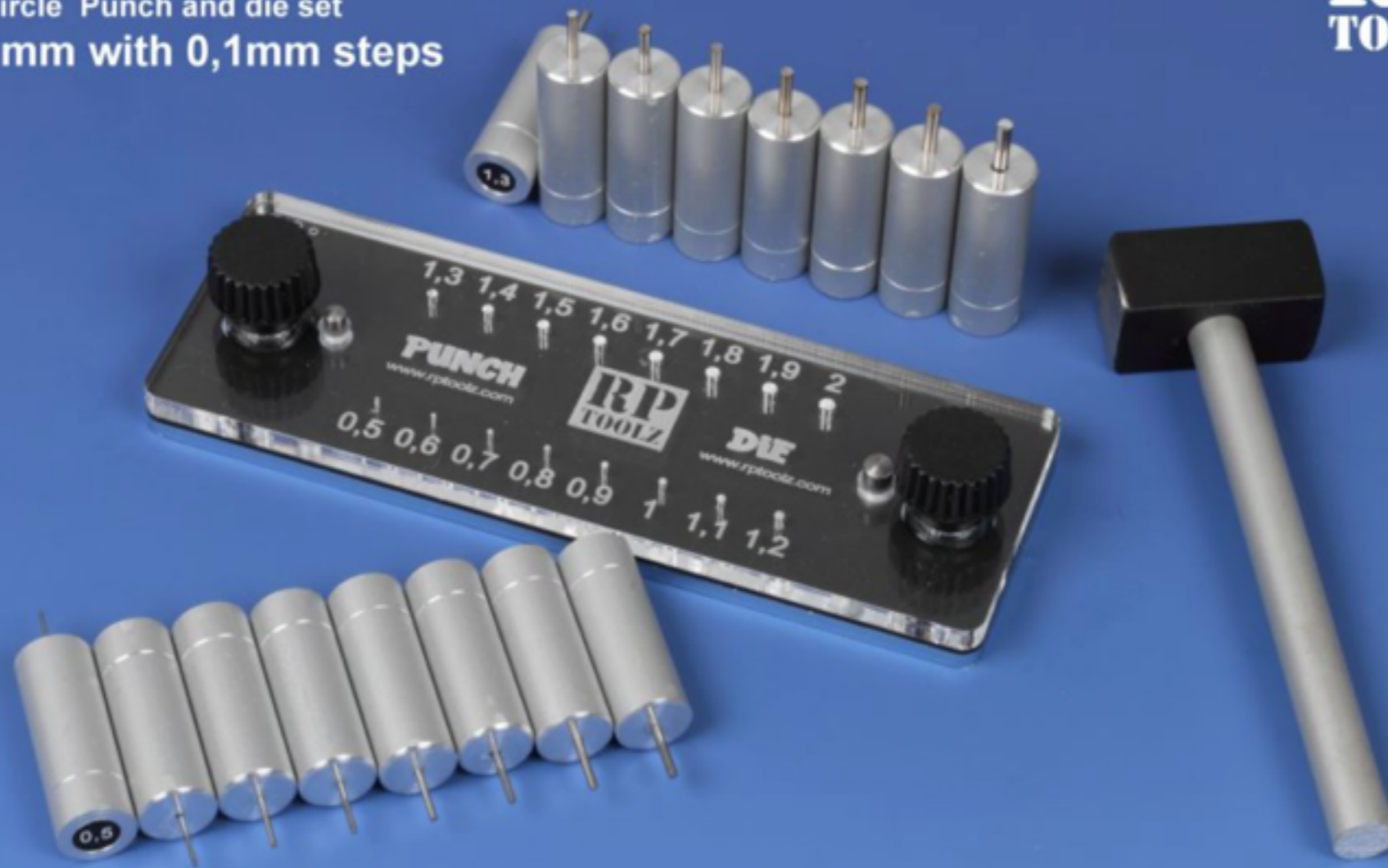
Detroit, Toledo & Ironton
41' Greenville Gondola

Punch and die set

Small circle Punch and die set
0,5-2 mm with 0,1mm steps

○○○

RP
TOOLZ



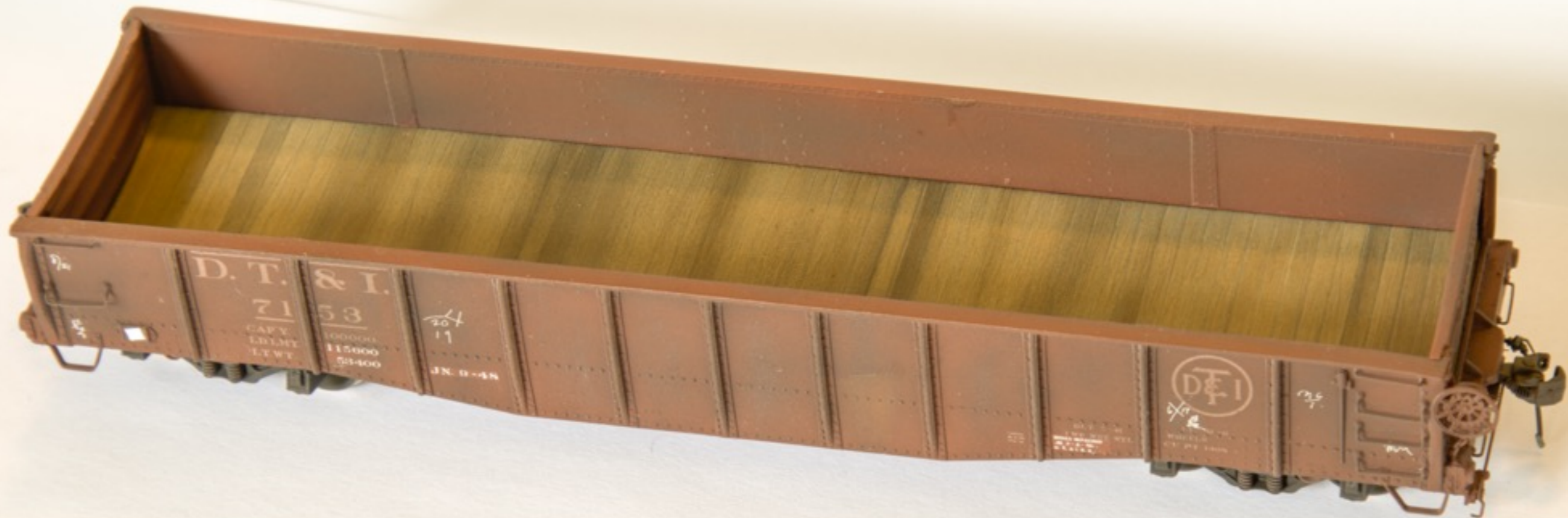
Detroit, Toledo & Ironton
41' Greenville Gondola



Detroit, Toledo & Ironton 41' Greenville Gondola

Blog posts about this project:

- Part One - <http://prototopics.blogspot.com/2017/05/building-dt-7000-series-gon-or-nothing.html>
- Part Two - <http://prototopics.blogspot.com/2017/05/building-dt-7000-series-gon-part-2.html>



Detroit, Toledo & Ironton 41' Greenville Gondola

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Chicago and North Western riveted PS-1 Box Car

- 4,625 cars total, built in 1948, 1949, 1951, 1953
- reflect the changes to the PS-1 design over that period (excepting the riveted side construction)



- 7-panel Superior door - wider second panel

- 7-panel Superior door - wider third panel



Chicago and North Western riveted PS-1 Box Car



Chicago and North Western riveted PS-1 Box Car

- Intermountain or Branchline car body
- Speedwitch (early) or Intermountain (late) PS-1 roof
- Kadee end pattern
- Kadee, Intermountain or good 'enuff' underframe members
- Floor - scratch or model
- Doors -
 - Youngstown - Intermountain, Branchline or Kadee
 - Superior - Southwest Scale
- Tab sections below side sills - model or scratch



Chicago and North Western riveted PS-1 Box Car

- Kadee end pattern
- Doors -
 - Youngstown - Intermountain or Branchline
 - Superior - Southwest Scale



Chicago and North Western riveted PS-1 Box Car

- See *Railway Prototype Cyclopedia, Volume 1*
- Speedwitch decal D195 shown above



Pacific Fruit Express R-40-14



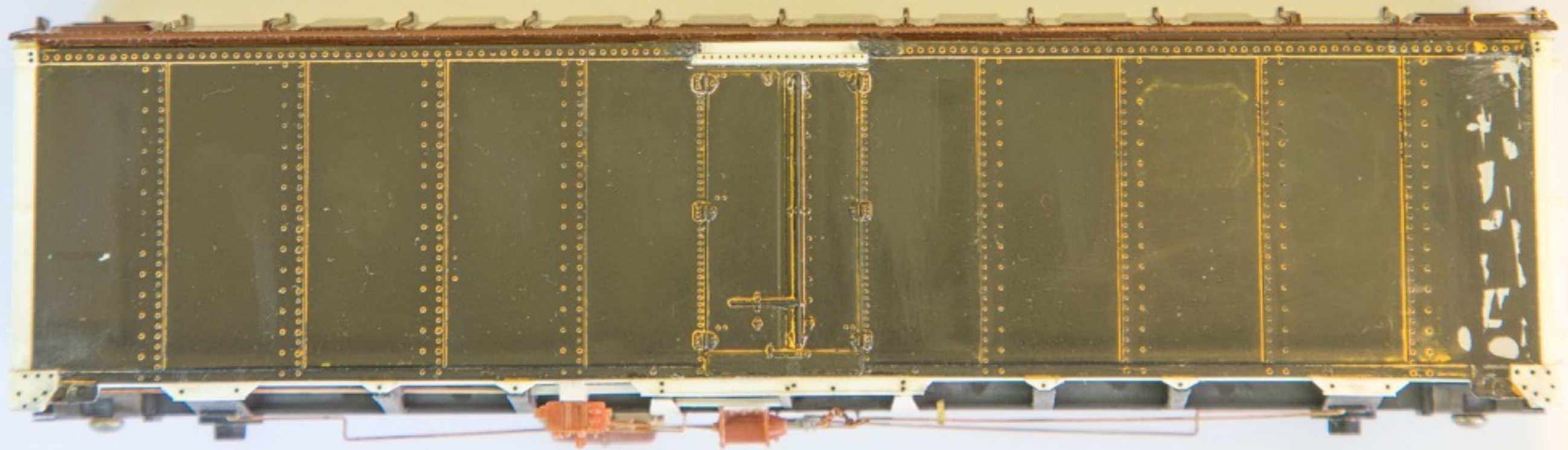
Pacific Fruit Express R-40-14

Pacific Fruit Express R-40-14



Intermountain (recommended)

Athearn (not recommended... only for fun)



Pacific Fruit Express R-40-14



Athearn in foreground, Intermountain in back

Pacific Fruit Express R-40-14



Athearn

- Intermountain roof (R-40-23)
- Details West round corner Dreadnaught ends
- Tahoe Models trucks (ignore “shop” trucks shown above)
- other details
- Speedwitch decals

Pacific Fruit Express R-40-14

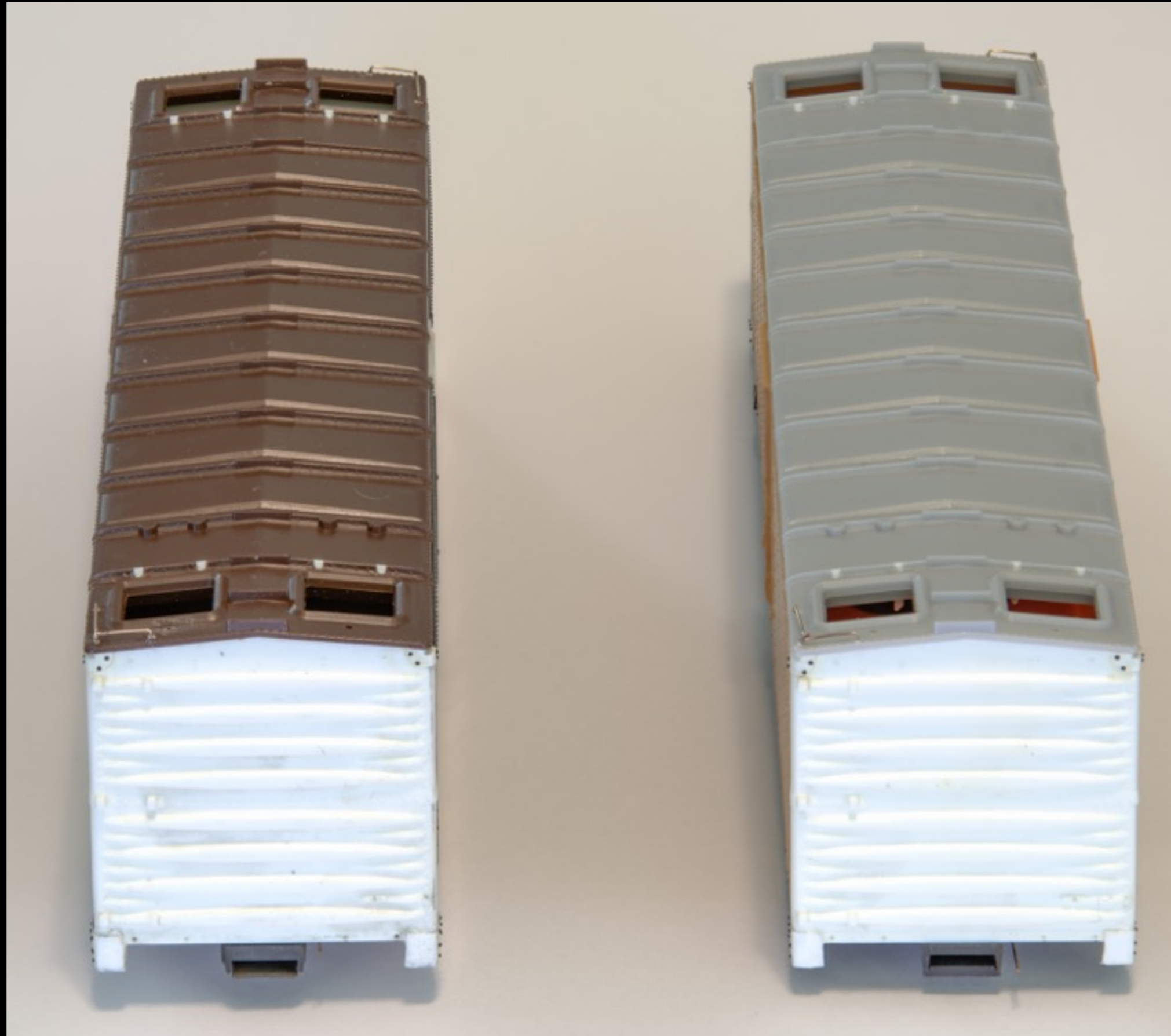


Intermountain R-40-10 kit

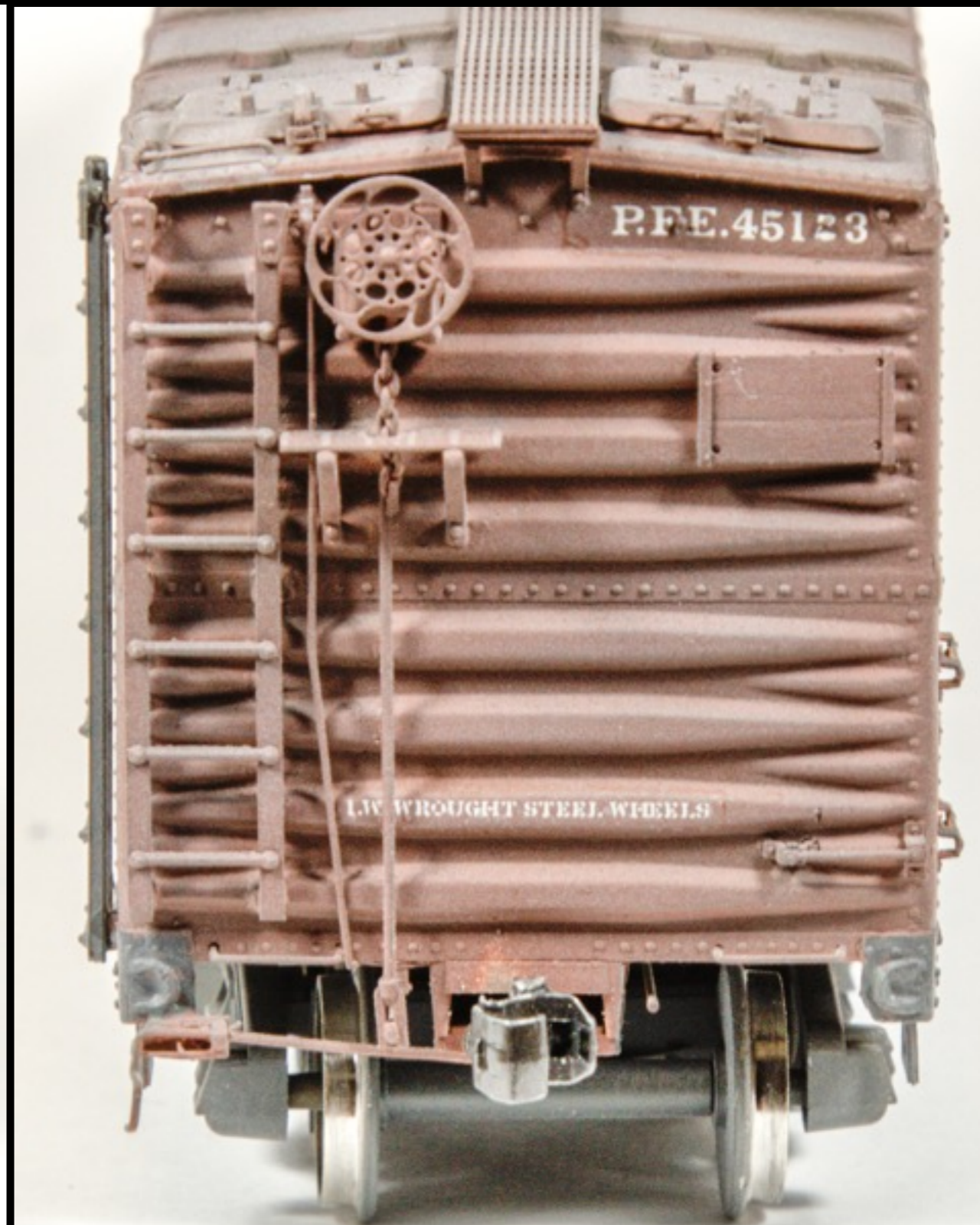
- Intermountain roof (R-40-23)
- Details West round corner Dreadnaught ends
- Tahoe Models trucks (ignore “shop” trucks shown above)
- other details
- Speedwitch decals

Pacific Fruit Express R-40-14

- Details West round corner
Dreadnaught ends
- Details West
Equipco hatch
covers
- Intermountain
R-40-23 roof (or
preferably Pacific
Freight Enterprises)
- many scratchbuilt
details
- Speedwitch decals
- subject of an in-
depth article in
*Prototype Railroad
Modeling Vol. Four*



Pacific Fruit Express R-40-14



Pacific Fruit Express R-40-14



Subject of an in-depth article in *Prototype Railroad Modeling Vol. Four*



National Car Co. (Fruit Growers) 37' Meat Reefer



National Car Co. (Fruit Growers) 37' Meat Reefer



National Car Co. (Fruit Growers) 37' Meat Reefer



National Car Co. (Fruit Growers) 37' Meat Reefer



National Car Co. (Fruit Growers) 37' Meat Reefer



National Car Co. (Fruit Growers) 37' Meat Reefer

- Shortened Accurail sides and roof
- Scratchbuilt ends and underframe
- Decals for this car custom printed by PDC
- Various details



National Car Co. (Fruit Growers) 37' Meat Reefer





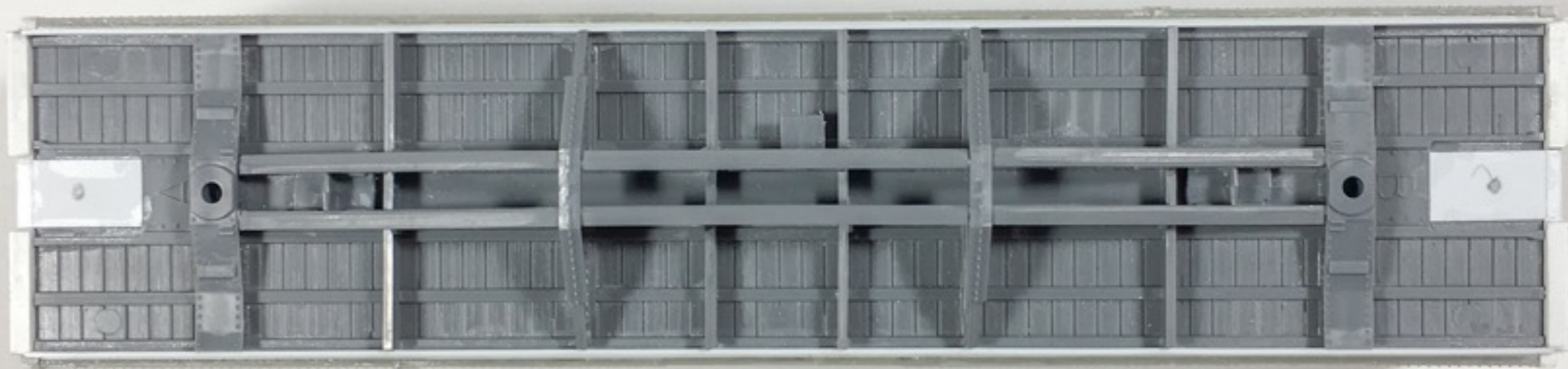
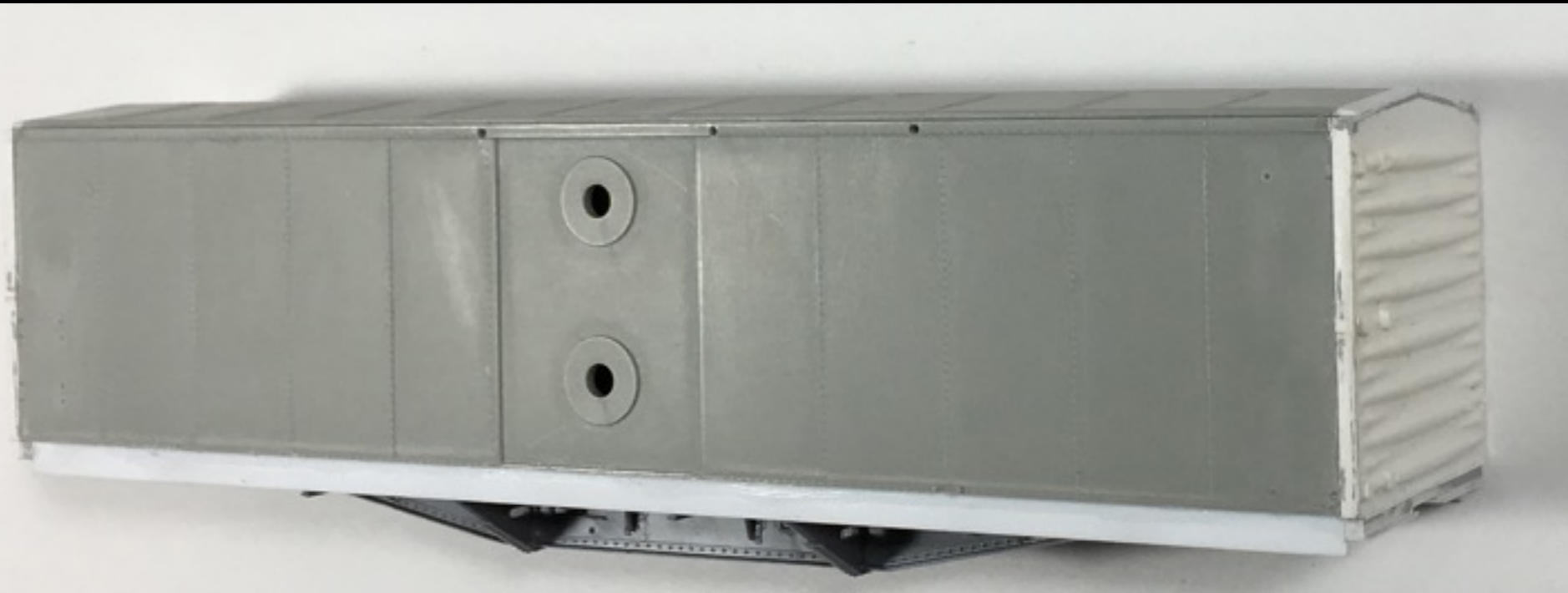
Nashville, Chattanooga & St. Louis XM-31
Rebuilt Box Car



Nashville, Chattanooga & St. Louis XM-31 Rebuilt Box Car

- Atlas 1932 ARA Box Car
- Modified Details West Dreadnaught ends
- Tichy flat car underframe
- Scratchbuilt side sill details
- Decals from Speedwitch

Nashville, Chattanooga & St. Louis XM-31 Rebuilt Box Car





New York Central 50' AAR box car with end door



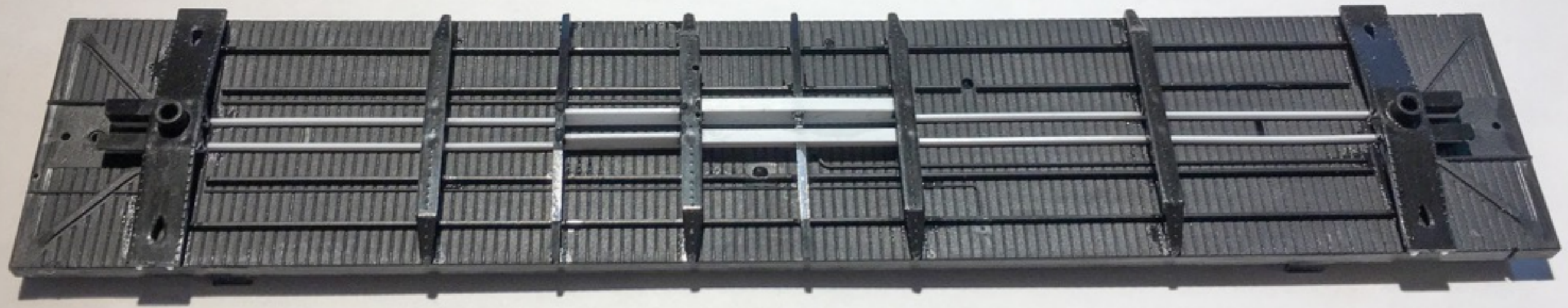
New York Central 50' AAR box car with end door

- Splice Proto 2000 box and end door auto cars
- Speedwitch door
- Decals from Speedwitch - D177



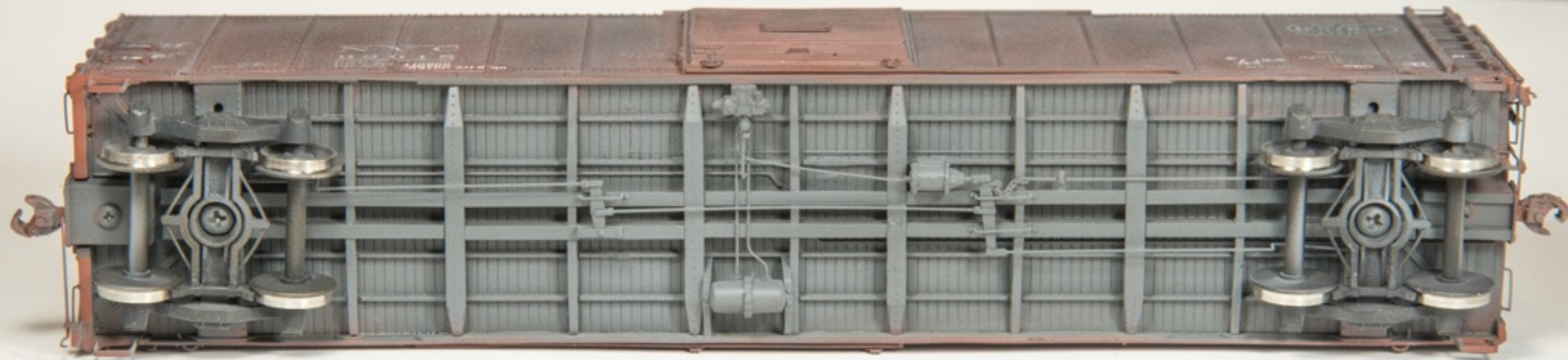
New York Central 50' AAR box car with end door

- Splice Proto 2000 box and end door auto cars
- Speedwitch door
- Decals from Speedwitch



New York Central 50' AAR box car with end door

- Proto 2000 box floor
- Branchline crossbearers and crossties
- Styrene center sills (three piece composition)





New York Central 50' AAR box car with end door

- Splice Proto 2000 box and end door auto cars
- resin Youngstown door
- bashed floor/underframe
- Tahoe Models trucks
- other details; profiled in *Prototype Railroad Modeling, Vol. Four*
- Speedwitch decals - D177



New York Central
50' AAR box car
with end door



Chicago and North Western riveted PS-1 Auto Car

Chicago and North Western riveted PS-1 Auto Car



Chicago and North Western riveted PS-1 Auto Car



R15

677

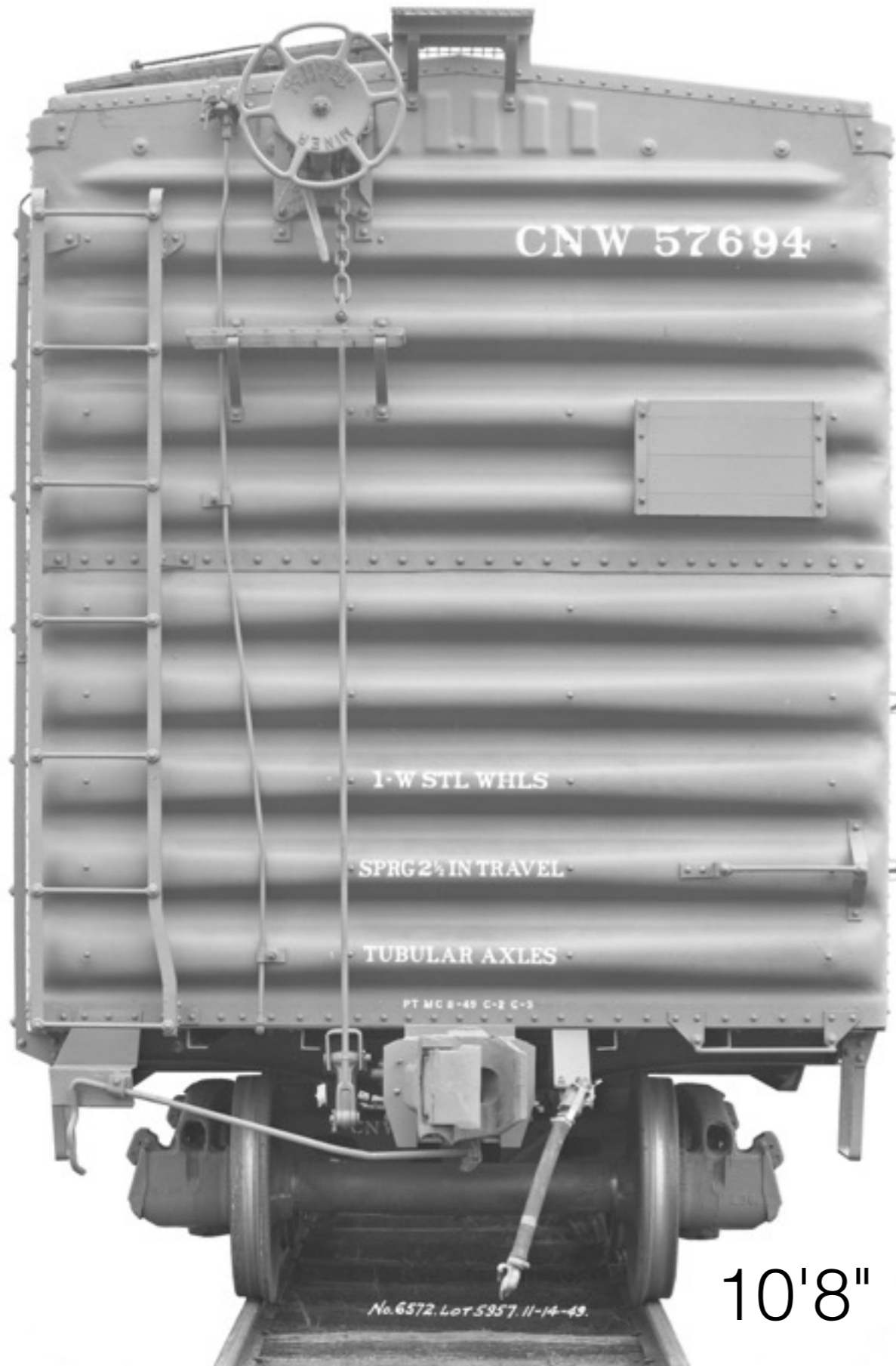
No. 6629 Lot 5951
10-21-49



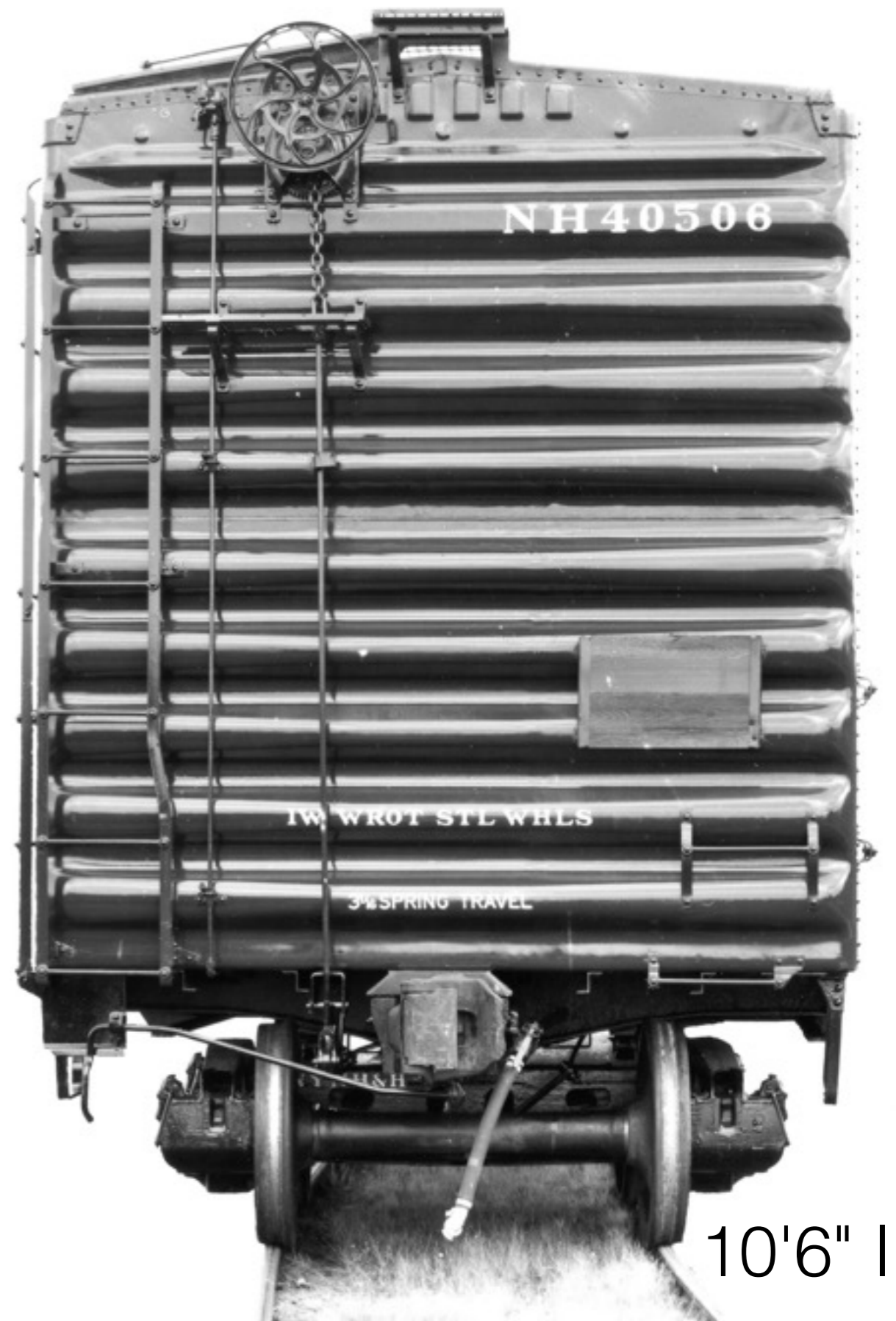
**Chicago and North Western
riveted PS-1 Auto Car**

No. 6565, Lot 5957.

10-21-49.

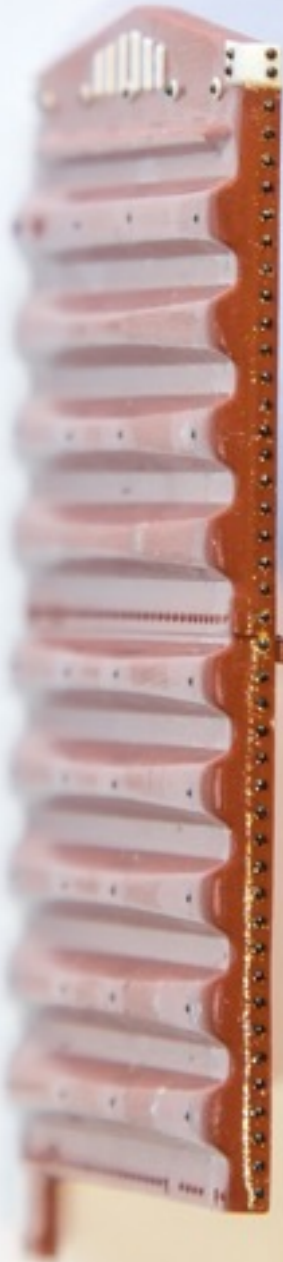


10'8" IH



10'6" IH

note that small trapezoids at top of end are "taller" on CNW car

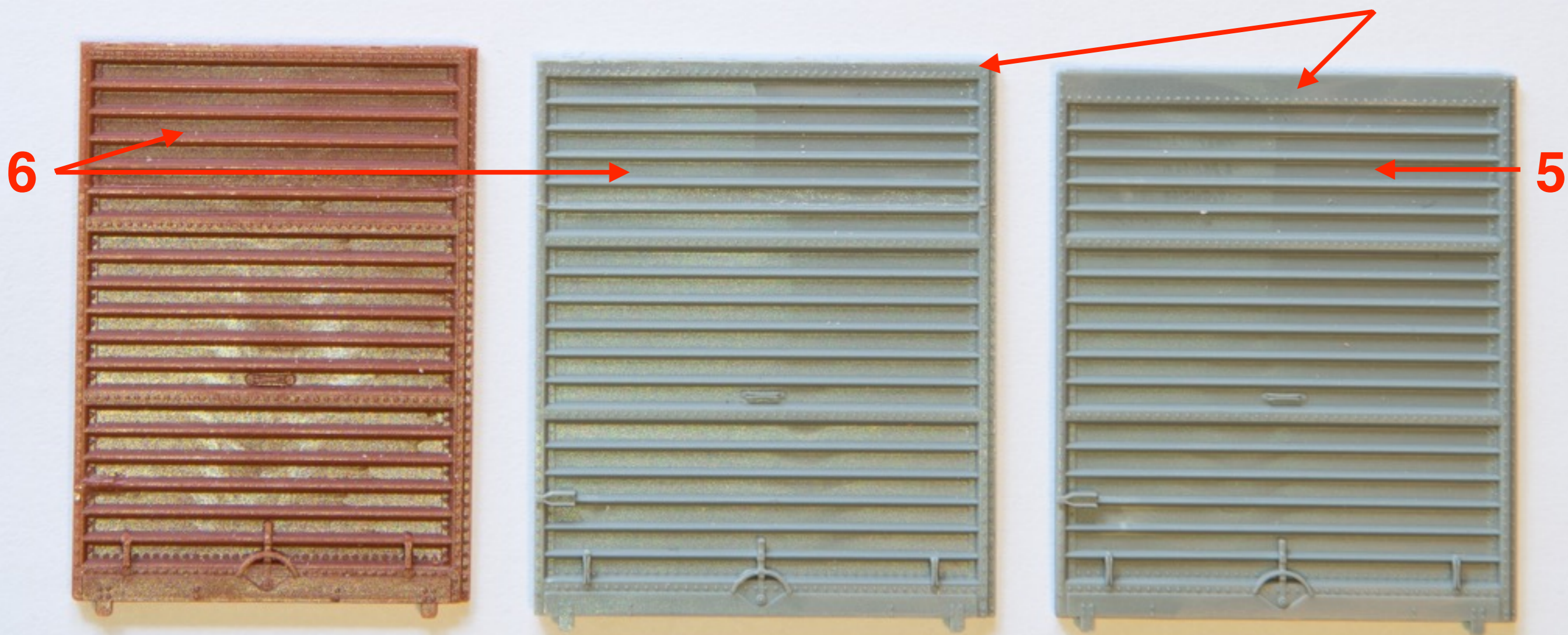


Chicago and North Western riveted PS-1 Auto Car

- Kadee end (removed from Kadee body)
- new trapezoids from 0.005" styrene
- new dimples and rivets at top
- round bolt heads on corrugations where wood nested
- new top corner braces with rivets
- Archer rivets along end corner
- filled right grab and placard board holes



Chicago and North Western riveted PS-1 Auto Car
outer roof ribs removed per early PS-1 roof



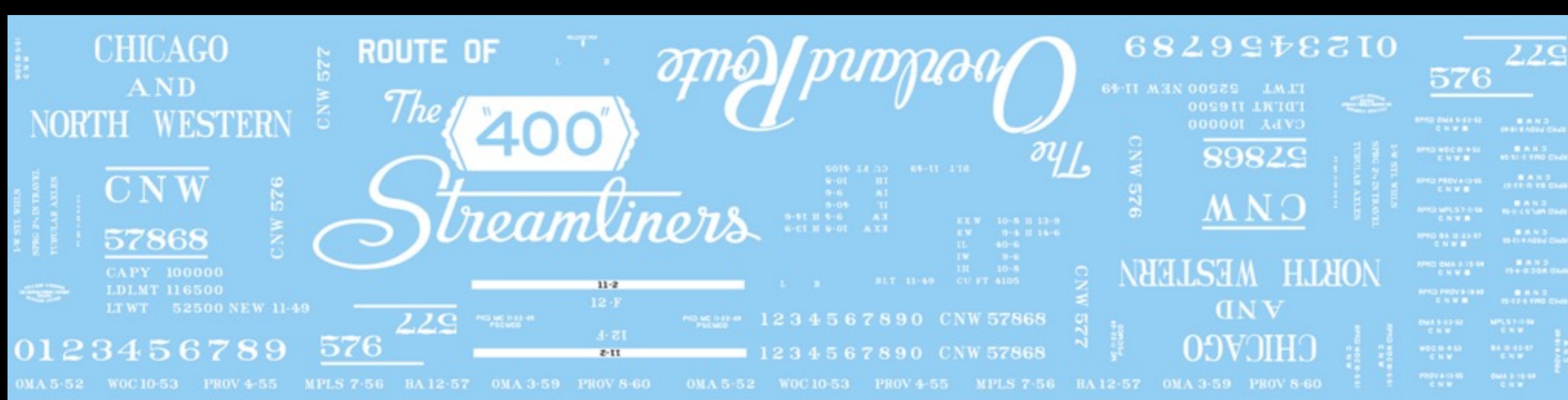
Chicago and North Western riveted PS-1 Auto Car

- 6-6-6 Improved Youngstown doors created by modifying Branchline Trains doors
- top of door shortened



Chicago and North Western riveted PS-1 Auto Car

- Scratchbuild sides and sills (CNW auto car is 10'8" inside height)
- Scratchbuild underframe



Chicago and North Western riveted PS-1 Auto Car

- Scratchbuild sides and sills (CNW auto car is 10'8" inside height)
- Scratchbuild underframe
- This will be a Speedwitch kit (everything is modified and cast, so why not?)
- For those who prefer to do the project the decals are available as Speedwitch D193



Seaboard Air Line AF-4 PS-1 Auto Car



Seaboard Air Line AF-4 PS-1 Auto Car

- Modified Kadee PS-1 end
- Modified Intermountain side
- Southwest Scale doors (modified left door)
- Intermountain roof with outer panel ribs removed
- Scratchbuilt underframe (or just use kit underframe)
- Various details
- Speedwitch decals - D194



Seaboard Air Line AF-4 PS-1 Auto Car

- Modified Kadee PS-1 end
- Modified Intermountain side
- Southwest Scale doors
(modified left door)



Seaboard Air Line AF-4 PS-1 Auto Car

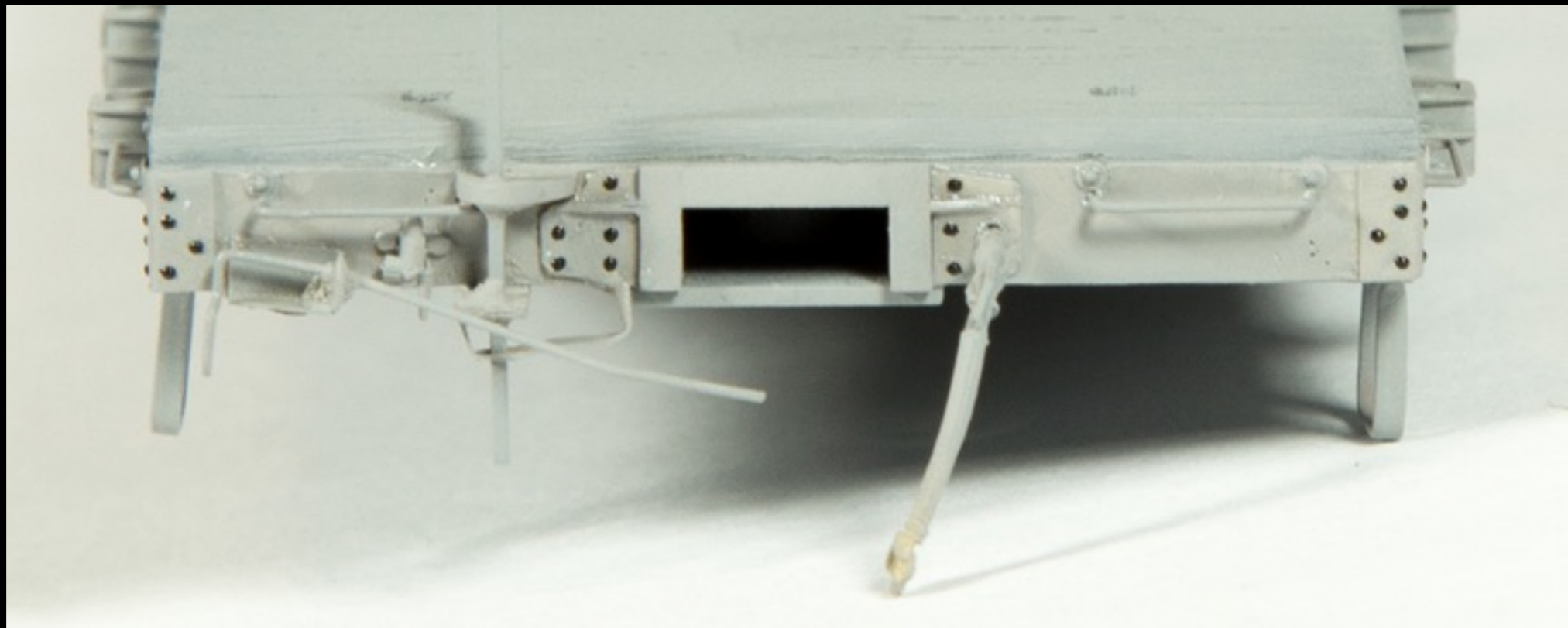


- Speedwitch decals - D194

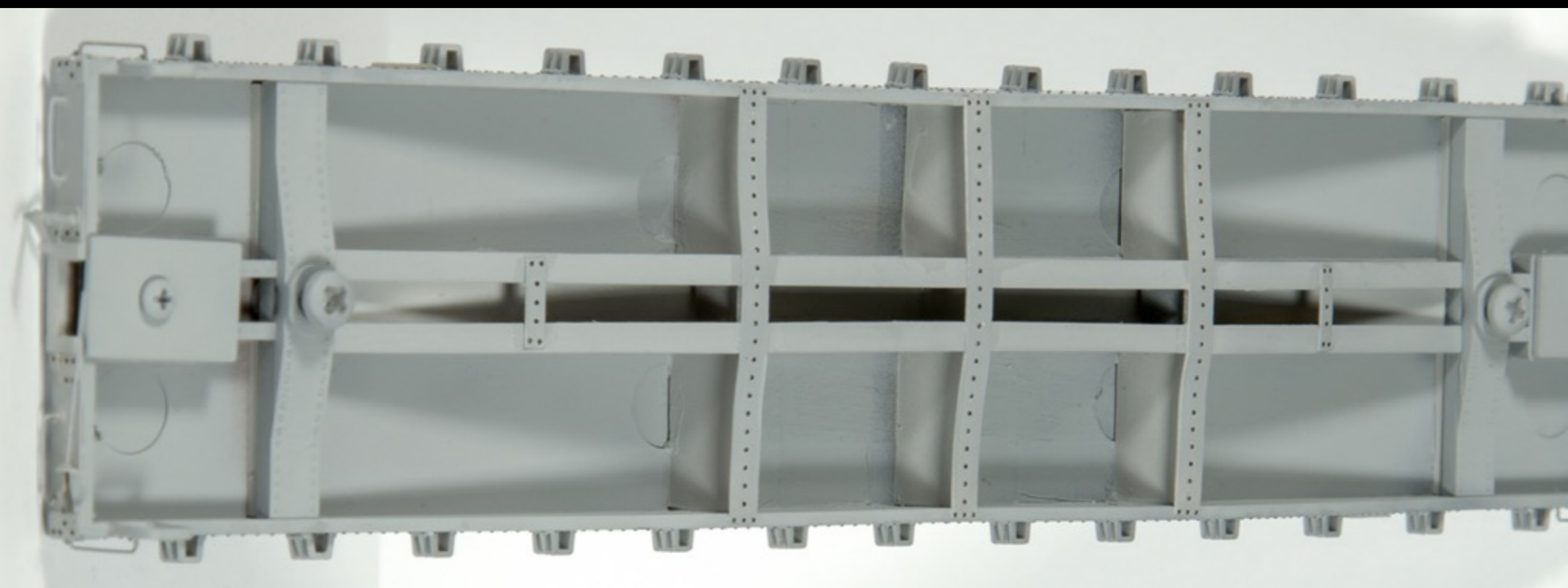
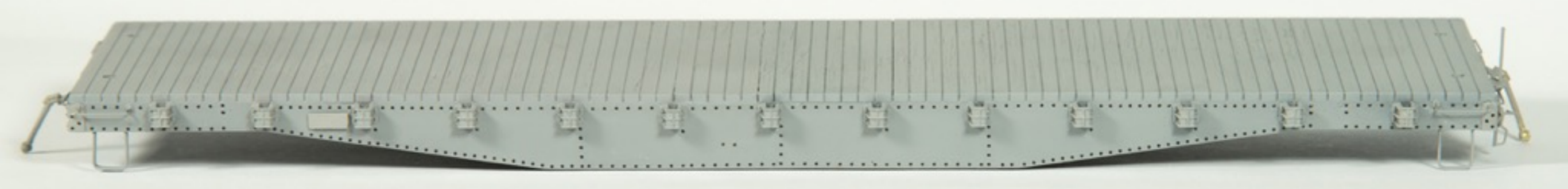


Missouri Pacific 8000-series 45' Flat Car

- Drawings available from Museum of Transportation, St. Louis



Missouri Pacific 8000-series 45' Flat Car



Missouri Pacific 8000-series 45' Flat Car



Missouri Pacific 8000-series 45' Flat Car
to be profiled in complete detail in *Prototype
Railroad Modeling, Volume Five*

Finding Kitbashing Opportunities

Resources

- Yahoo! Groups, STMFC, RPM-forum, resinfreightcars, etc.
- Railway Prototype Cyclopedia - <http://rpcycpub.com>
- Speedwitch - <http://speedwitchmedia.com>
- Magazine index - <http://trc.trains.com/magazineindex>
- *Car Builders Cyclopedia, Train Shed Cyclopedia* (excerpts from *CBCs*), *Railway Age, Railway Mechanical Engineer*, and other trade publications

Finding Kitbashing Opportunities

Resources

- Archer - <http://www.archertransfers.com>
- Hassler Profile - <http://www.hassler-profile.li>
- (Produkte: Profile, site is in German in metric)
- UMM-USA - <http://umm-usa.com/onlinestore/index.php>
- Yarmouth Model Works - <http://www.yarmouthmodelworks.com/index.php/Home/Index>

Finding Kitbashing Opportunities

This will be posted to prototopics.blogspot.com

Finding Kitbashing Opportunities

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