

Finding Kitbashing Opportunities

This will be posted to prototopics.blogspot.com

Finding Kitbashing Opportunities in Freight Cars

Ted Culotta

Valley Forge RPM
Malvern, PA
23-25 March 2018

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
- Start small, develop your skills, and move on to more challenging subjects

Spotting Details



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

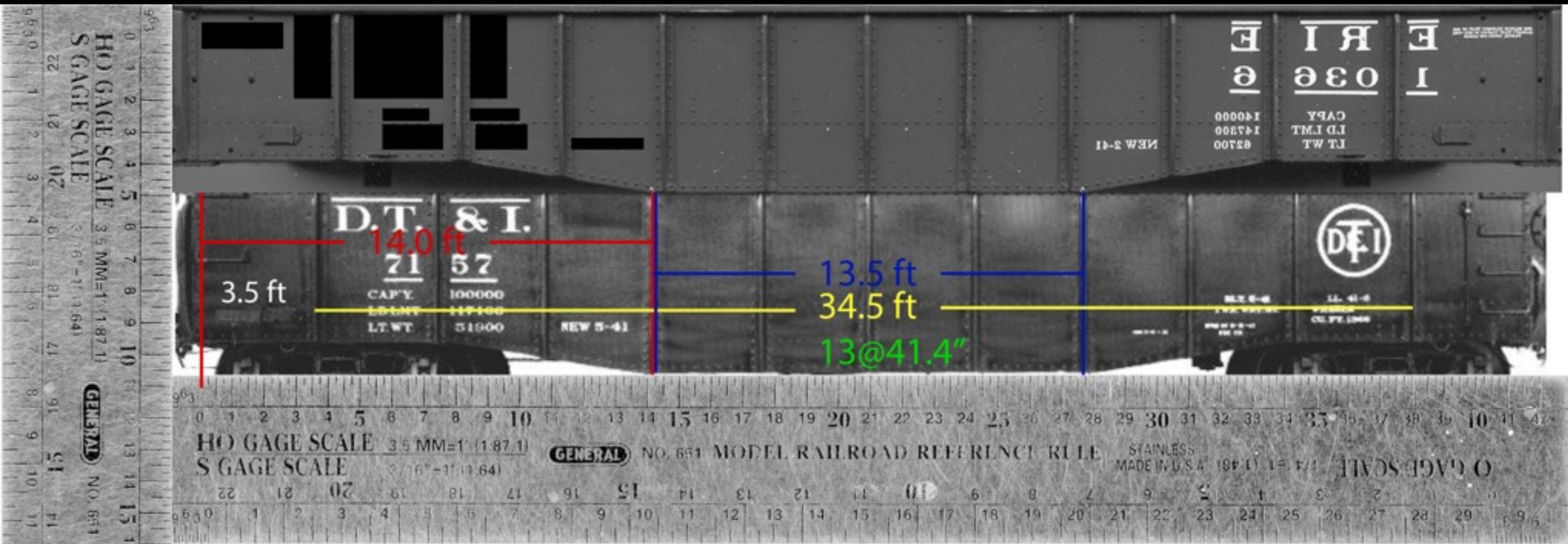
Spotting Details



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

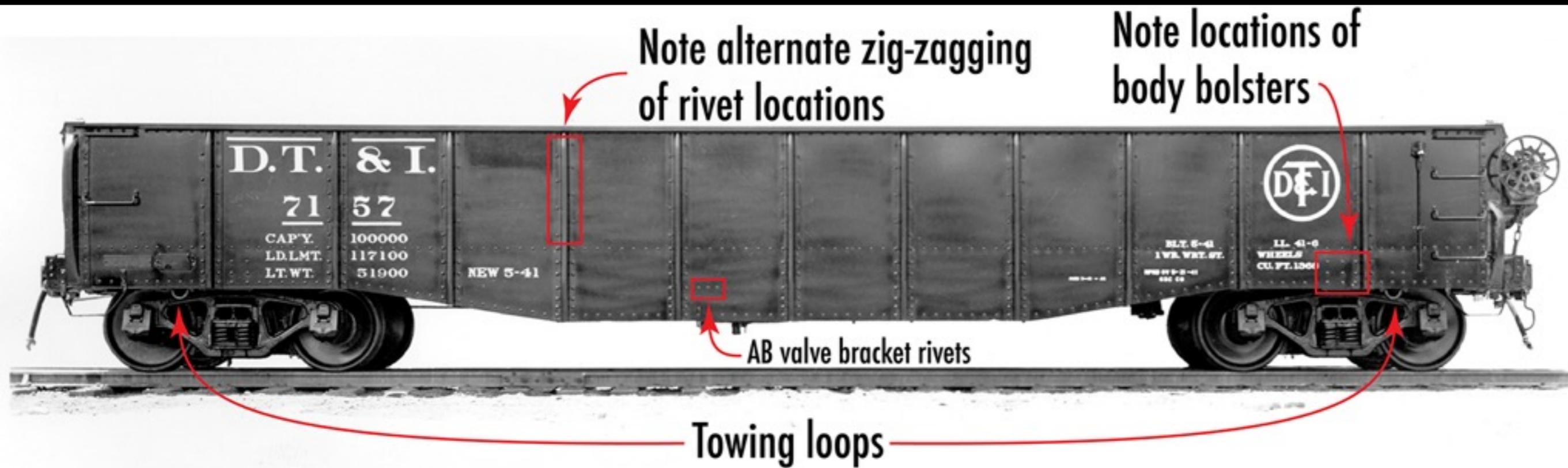


Detroit, Toledo & Ironton 41' Greenville Gondola



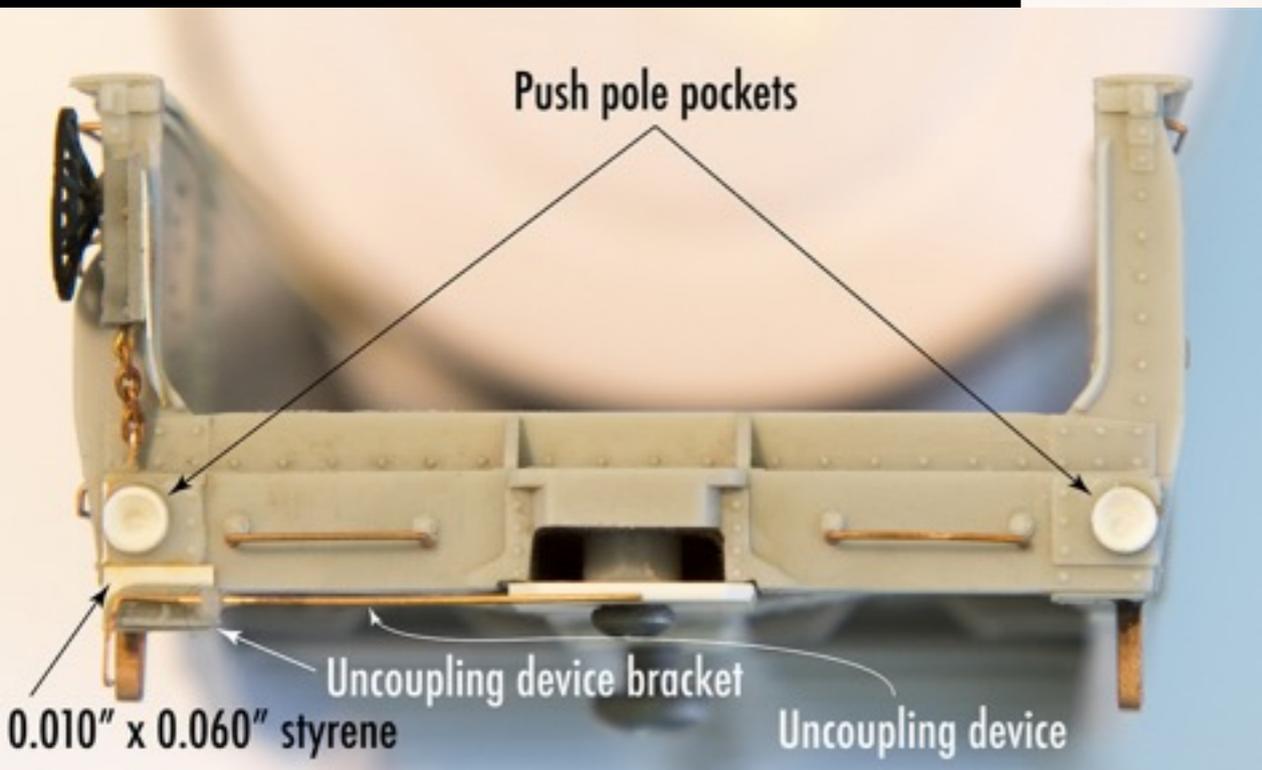
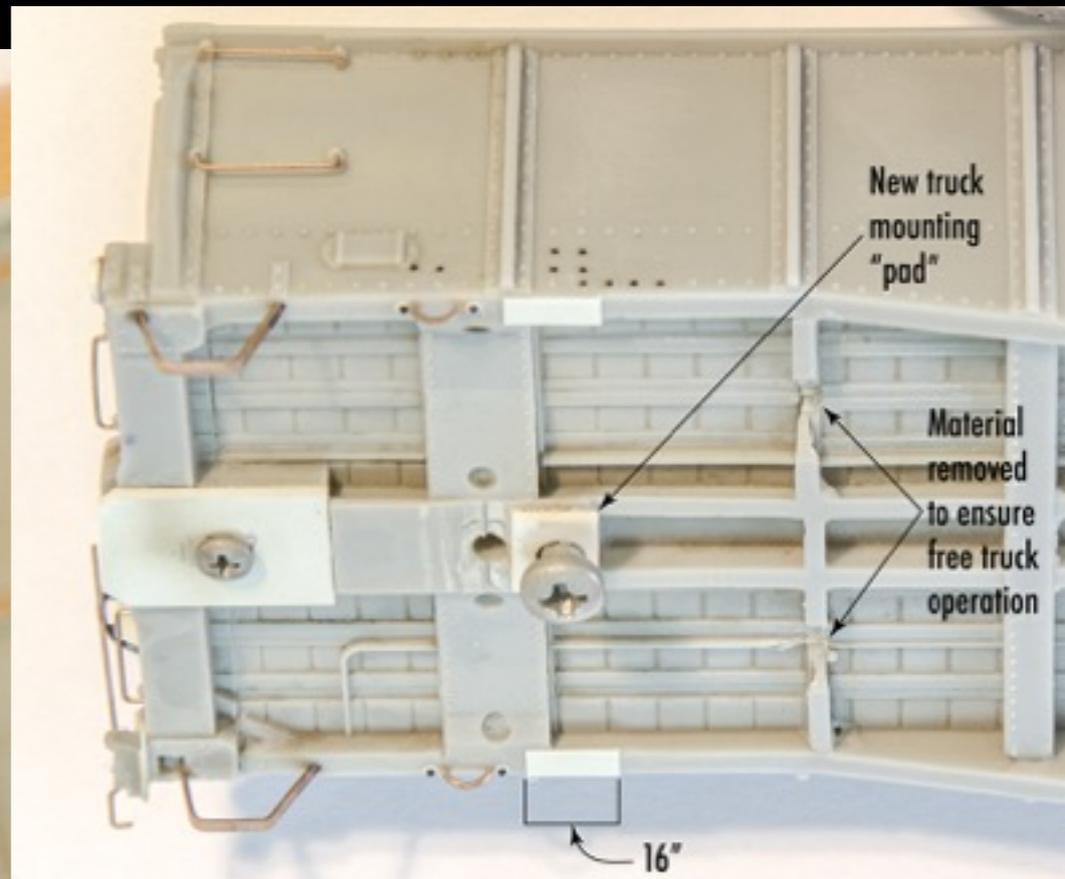
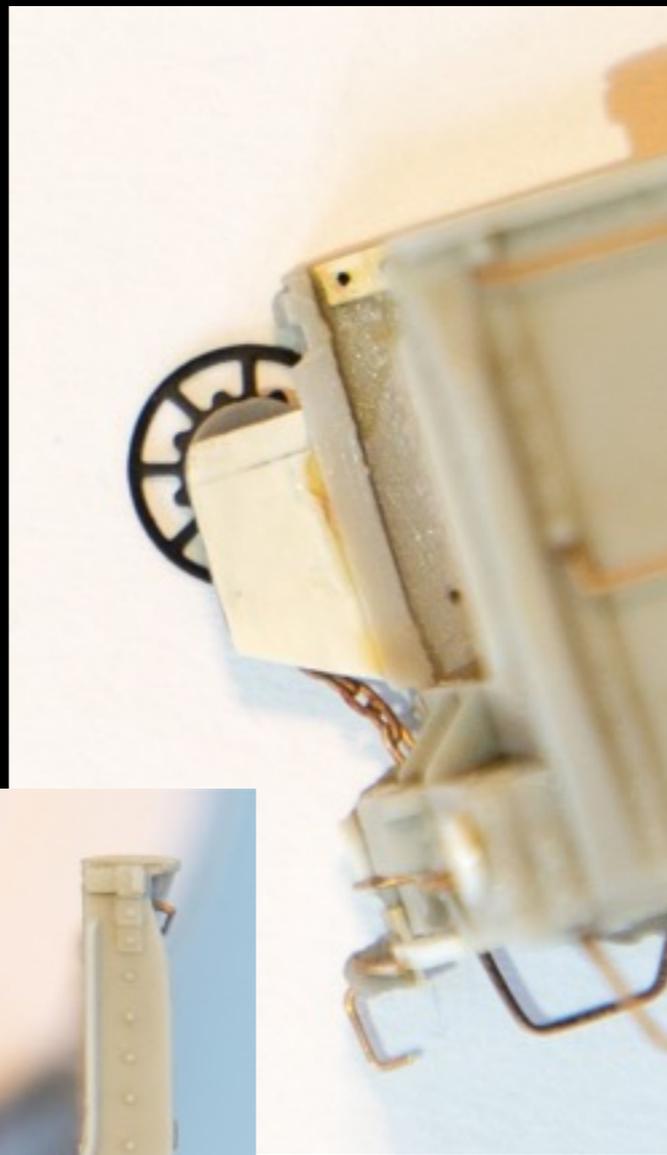
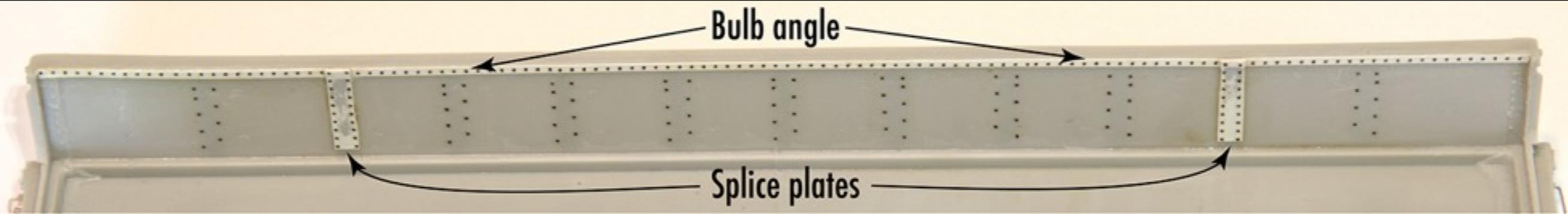
Detroit, Toledo & Ironton 41' Greenville Gondola

- 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



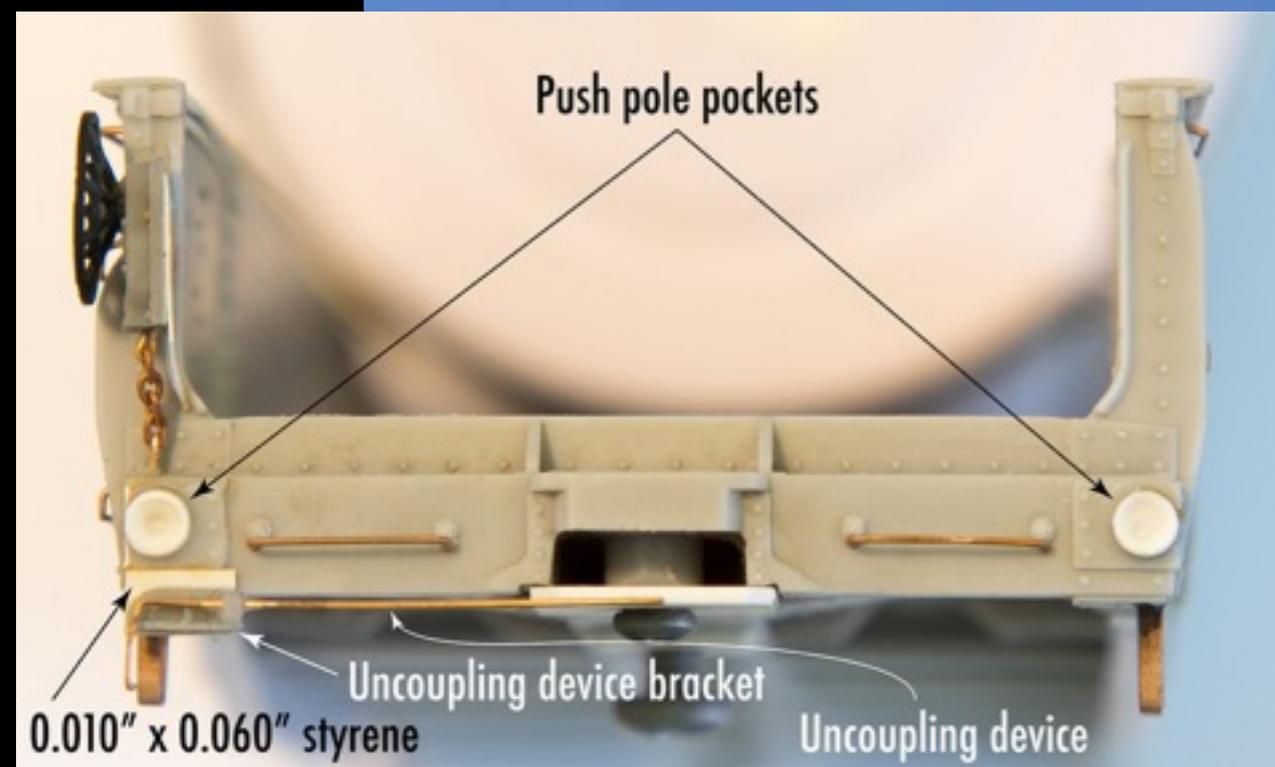
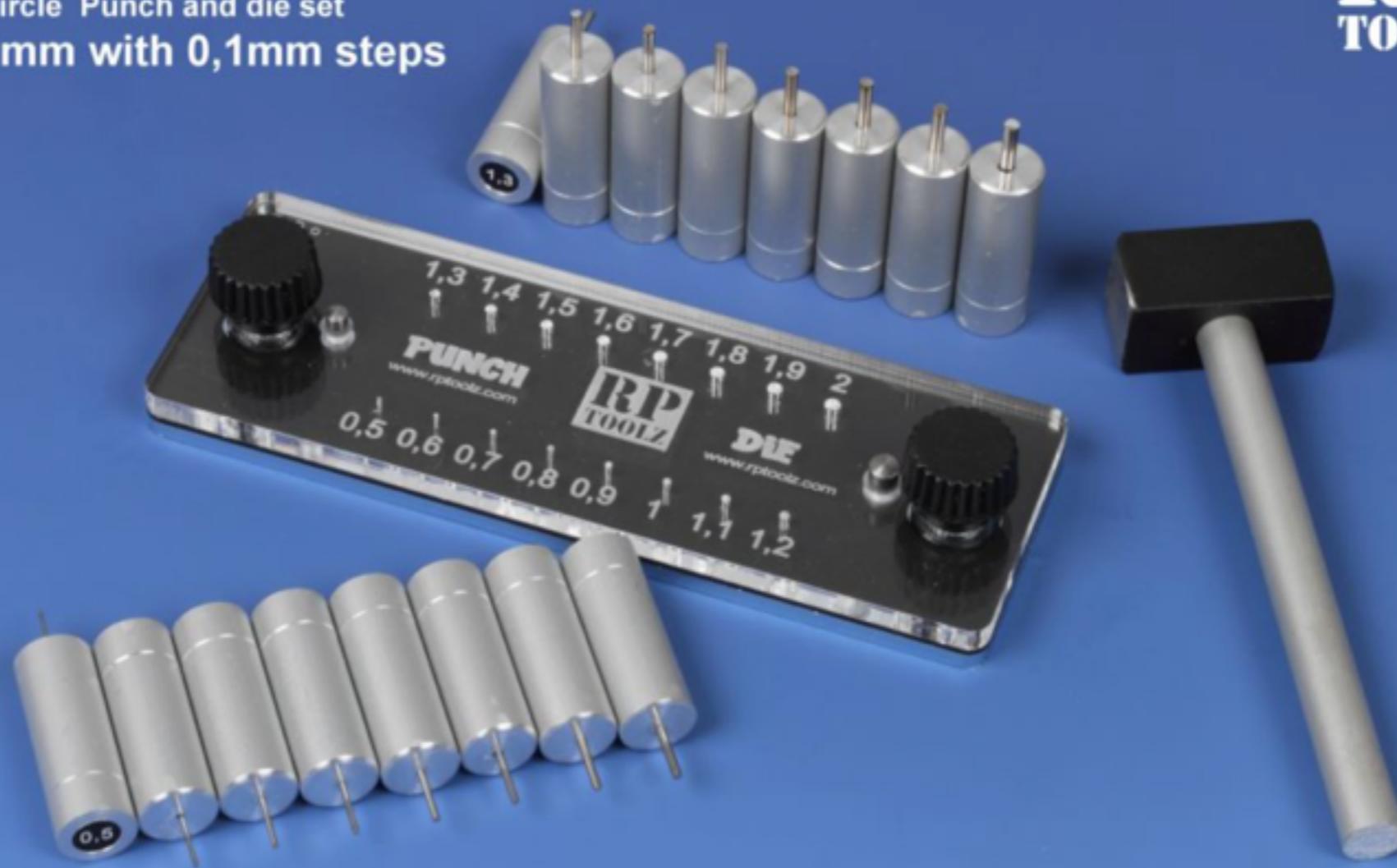
Detroit, Toledo & Ironton
41' Greenville Gondola

Punch and die set

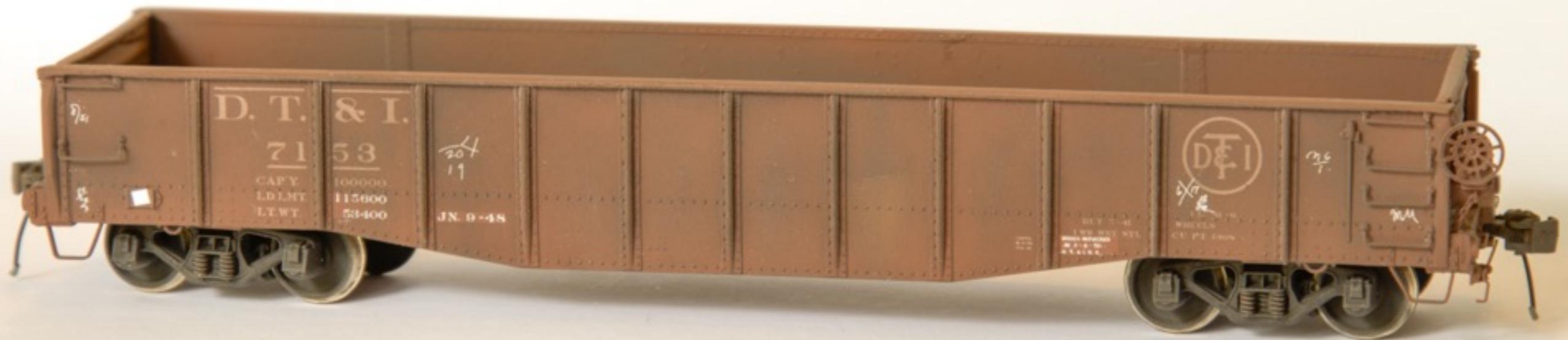
Small circle Punch and die set
0,5-2 mm with 0,1mm steps

○○○

RP
TOOLZ



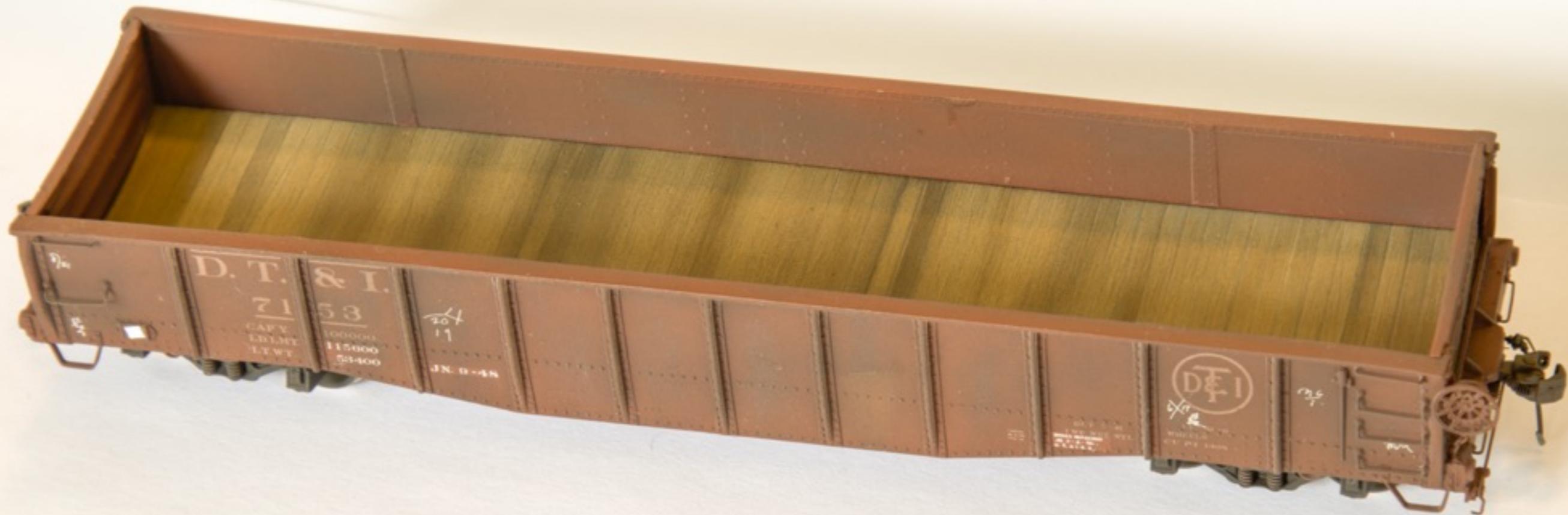
Detroit, Toledo & Ironton
41' Greenville Gondola



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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New York Central 50' AAR box car with end door



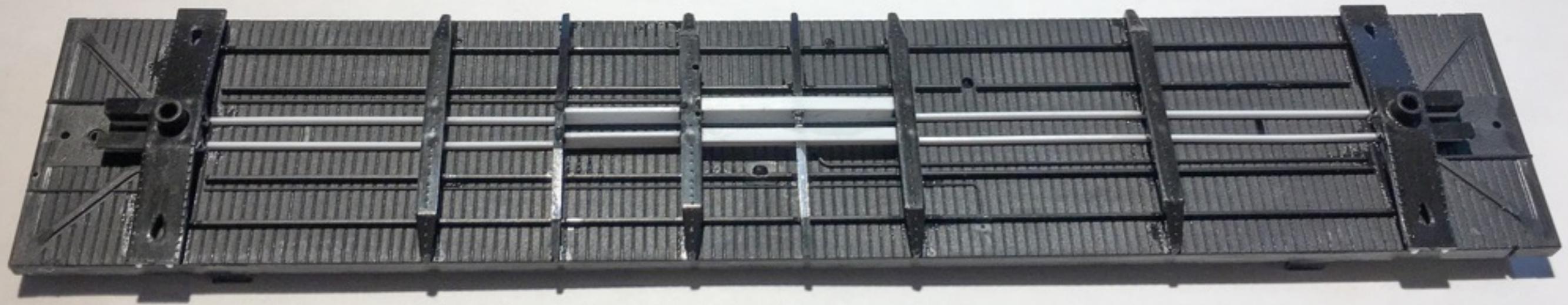
New York Central 50' AAR box car with end door

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



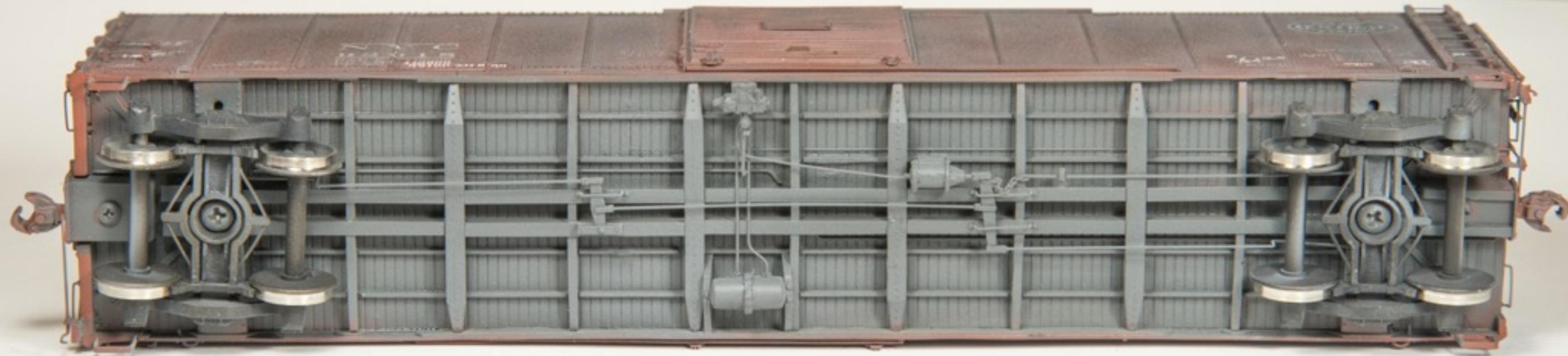
New York Central 50' AAR box car with end door

- 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

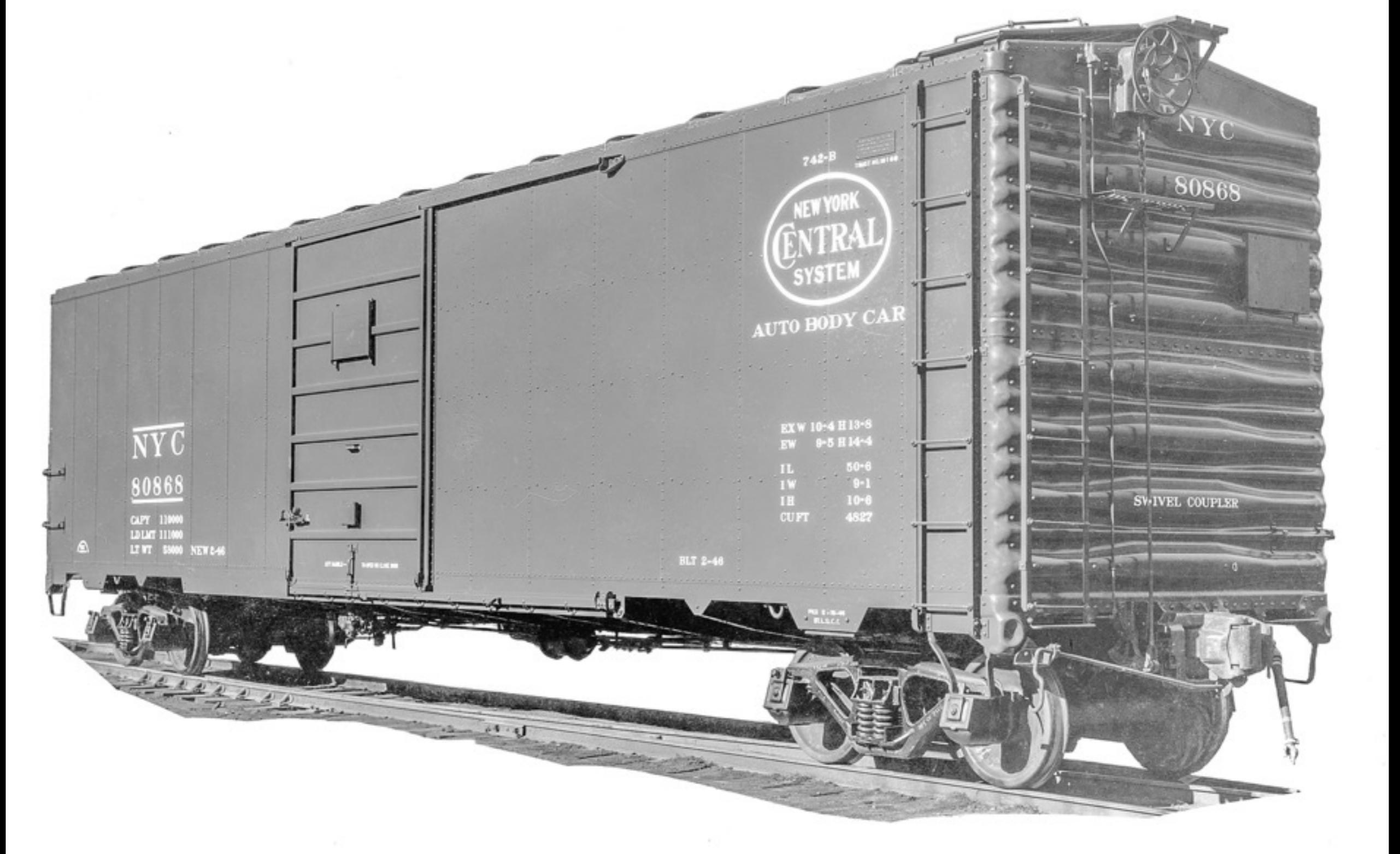
- Splice Proto 2000 box and end door auto cars
- resin Youngstown door
- bashed floor/underframe
- Tahoe Models trucks
- other details; profiled in *Prototype Railroad Modeling, Vol. Four*
- Speedwitch decals - D177



New York Central
50' AAR box car
with end door



New York Central 50' postwar AAR box car



New York Central 50' postwar AAR box car



New York Central 50' postwar AAR box car

- Branchline 50' AAR box car
- 4/4 Improved Dreadnaught ends
- 50' Murphy solid steel rectangular panel roof (resin)
- Speedwitch door
- Decals from Speedwitch - D177



New York Central 50' postwar AAR box car

- Optional - new floor/underframe with four total stringers (BLT car has six stringers)
- profiled in *Prototype Railroad Modeling, Vol. Four*





New York Central 50' postwar AAR box car

- Branchline body
- resin ends (4/4 Improved Dreadnaught)
- resin Murphy rectangular panel roof
- resin Superior door
- new scratch built floor/underframe with four total stringers (BLT car has six stringers)
- Tahoe Models trucks
- other details; profiled in *Prototype Railroad Modeling, Vol. Four*
- Speedwitch decals



New York Central
50' postwar AAR
box car



Pacific Fruit Express R-40-14



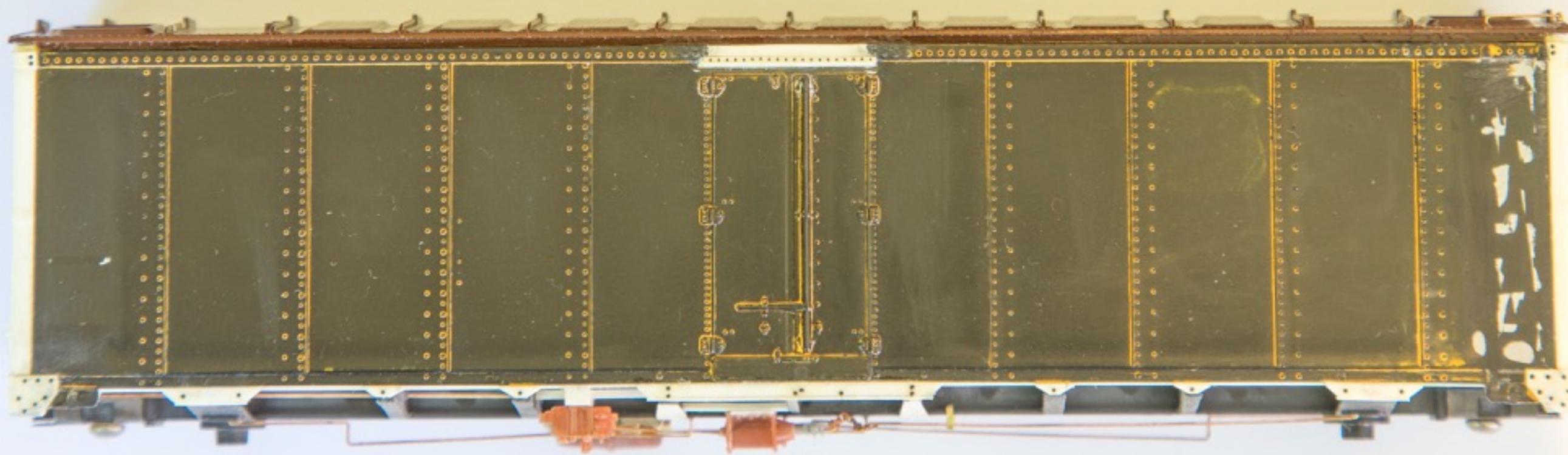
Pacific Fruit Express R-40-14

Pacific Fruit Express R-40-14

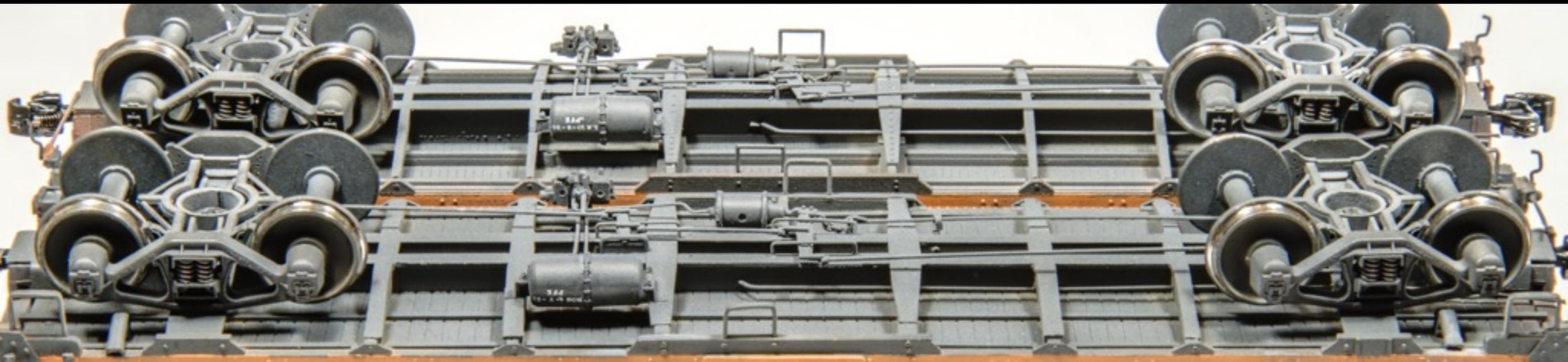


Intermountain (recommended)

Athearn (not recommended... only for fun)



Pacific Fruit Express R-40-14



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

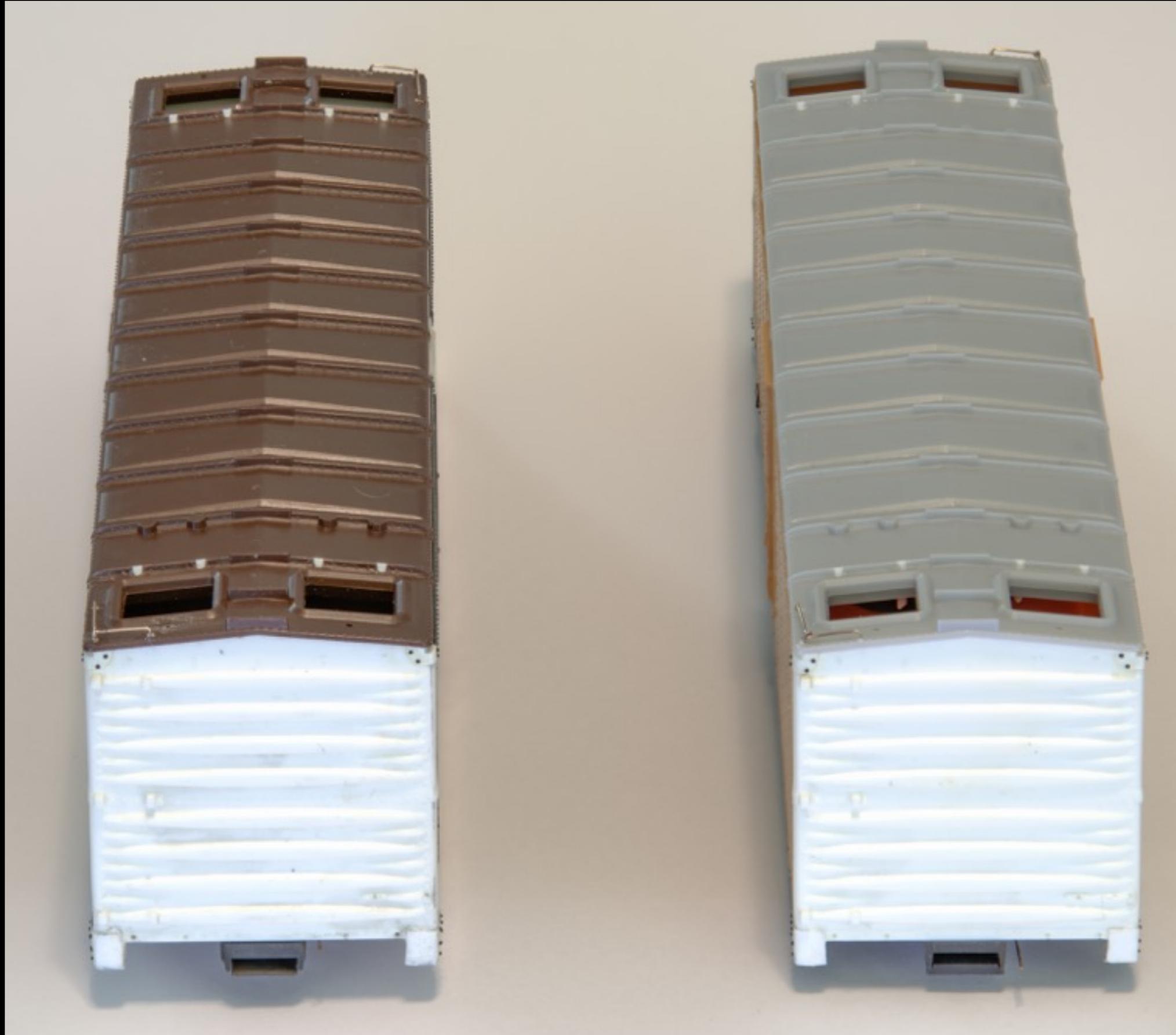


Intermountain R-40-10 kit

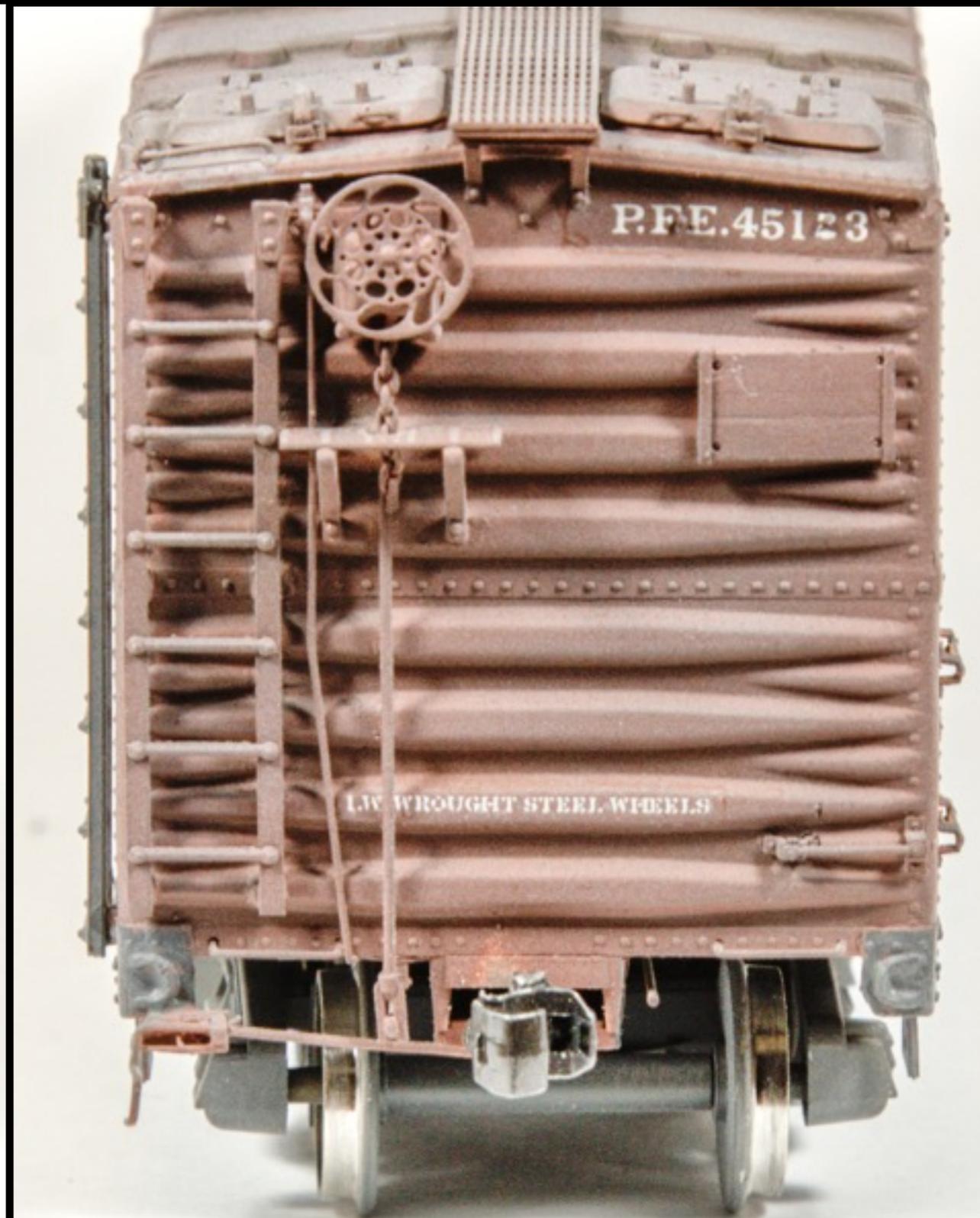
- Intermountain roof (R-40-23)
- Details West round corner Dreadnaught ends
- Tahoe Models trucks (ignore “shop” trucks shown above)
- other details
- Speedwitch decals

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



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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
- Various details
- Decals from Speedwitch (coming...)

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





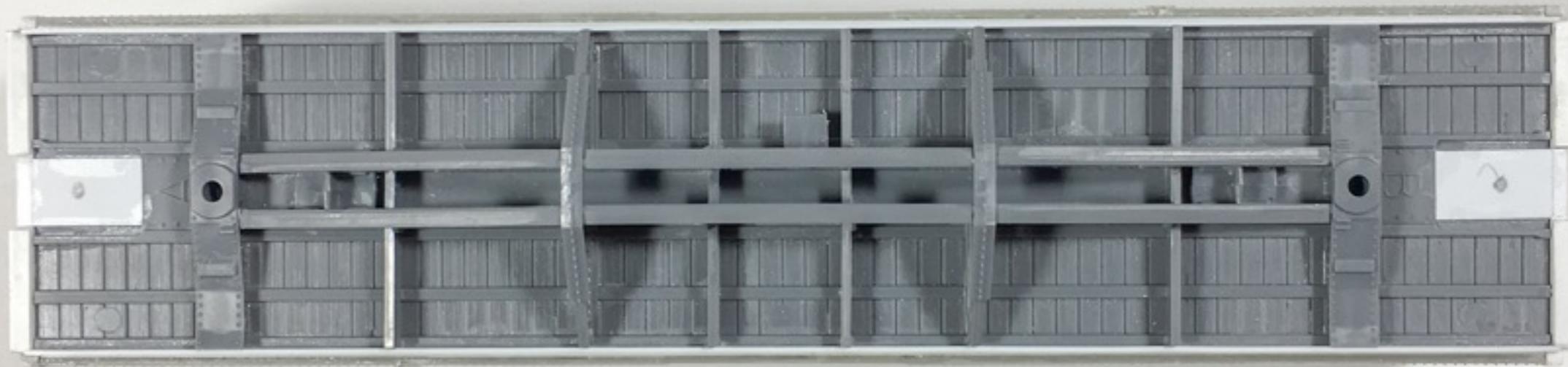
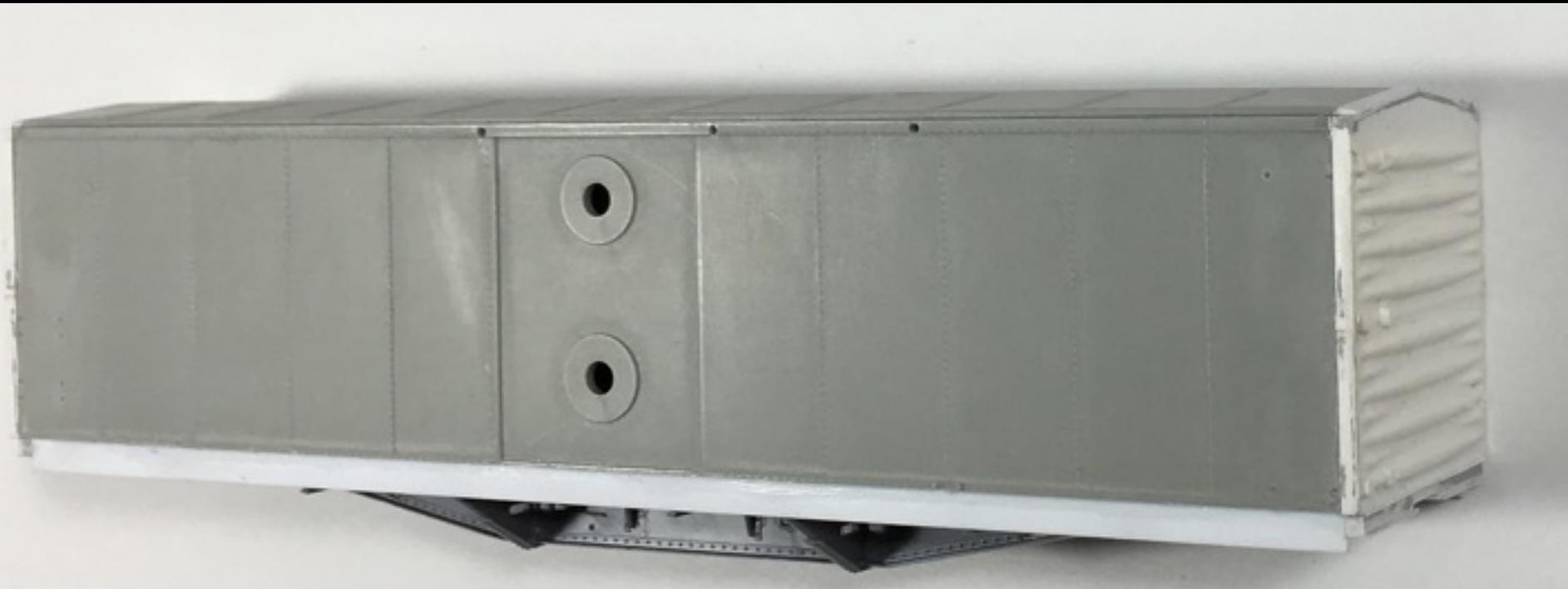
Nashville, Chattanooga & St. Louis XM-31
Rebuilt Box Car



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 (coming...)

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





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



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



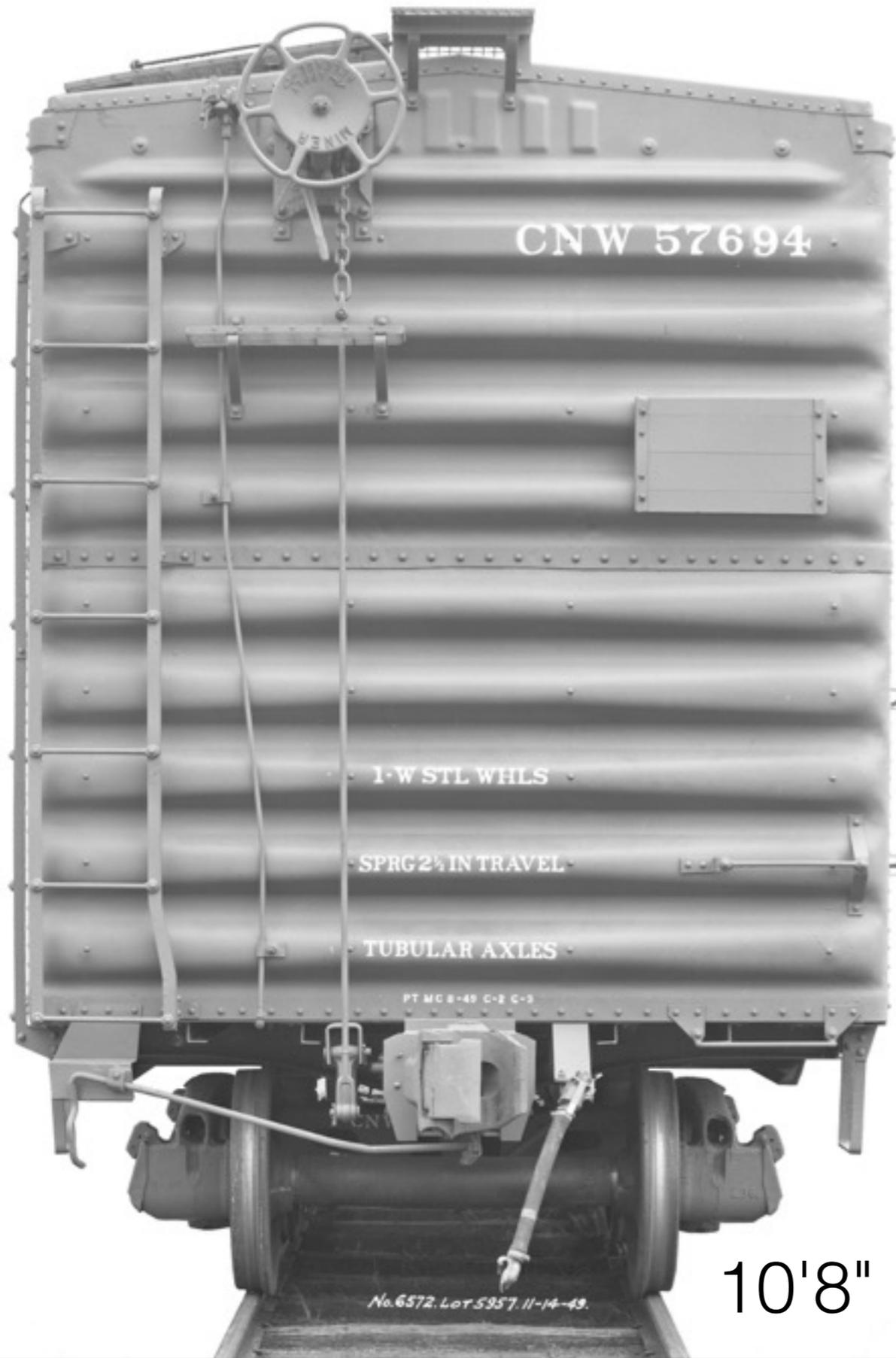
No. 6629 Lot 5951
10-21-49



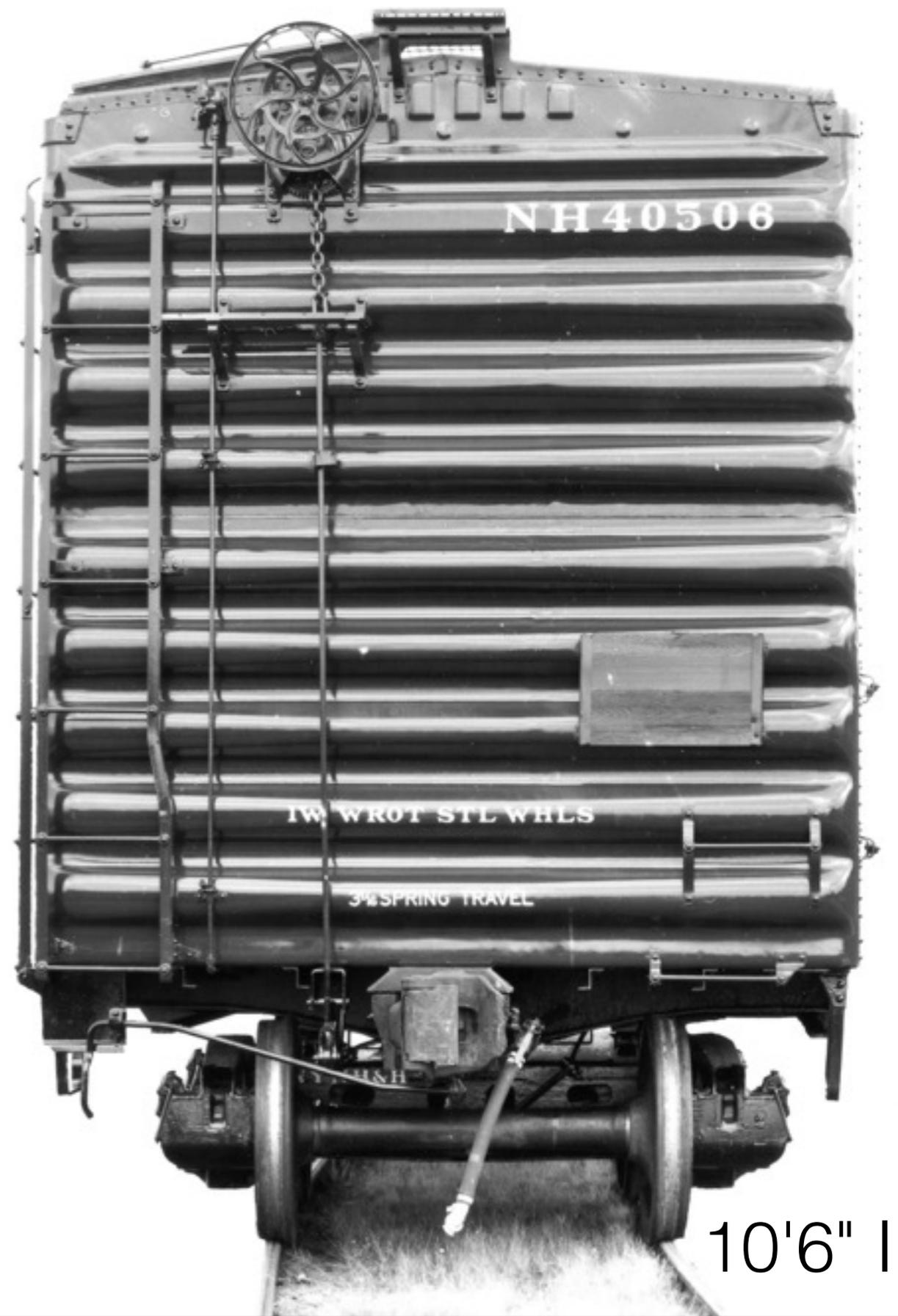
**Chicago and North Western
riveted PS-1 Auto Car**

No. 6565, Lot 5957.

10-21-49.

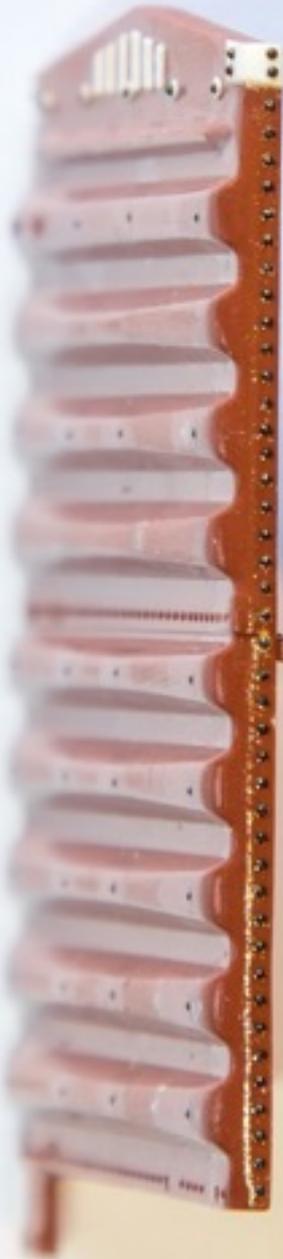


10'8" IH



10'6" IH

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

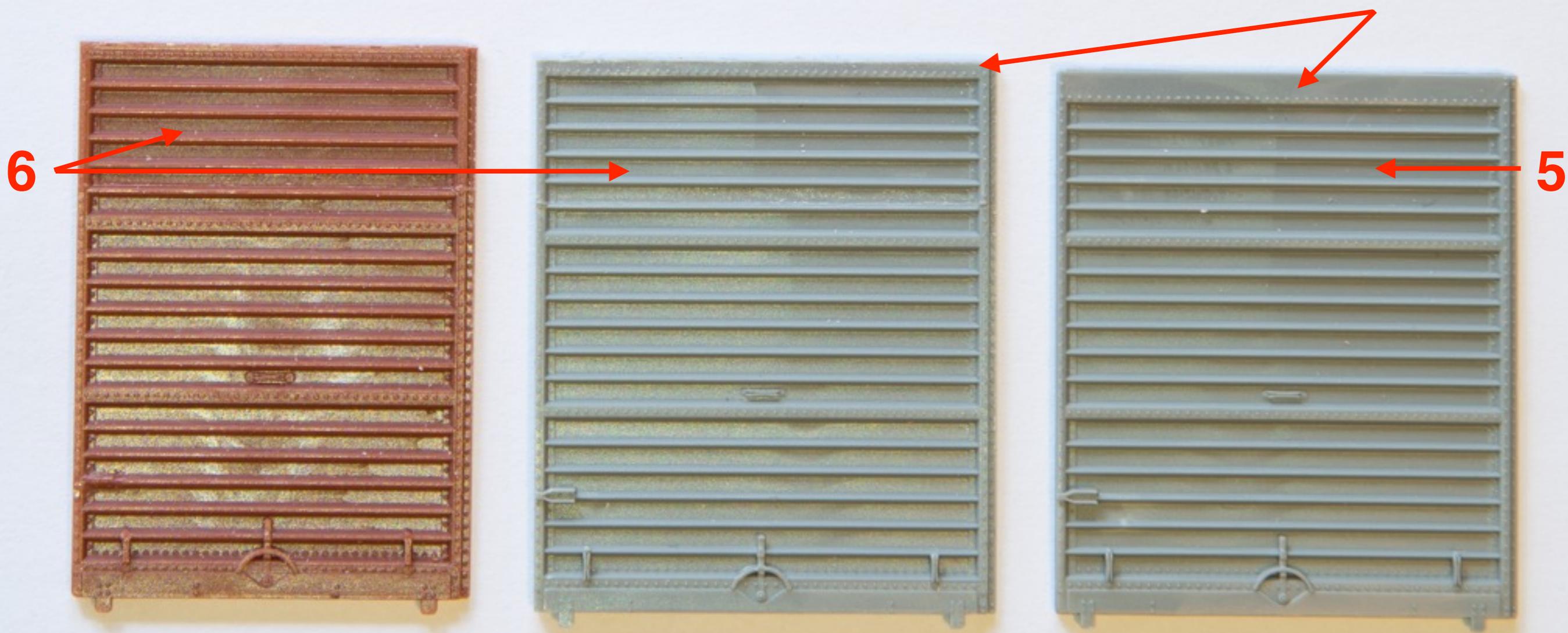


Chicago and North Western riveted PS-1 Auto Car

- 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



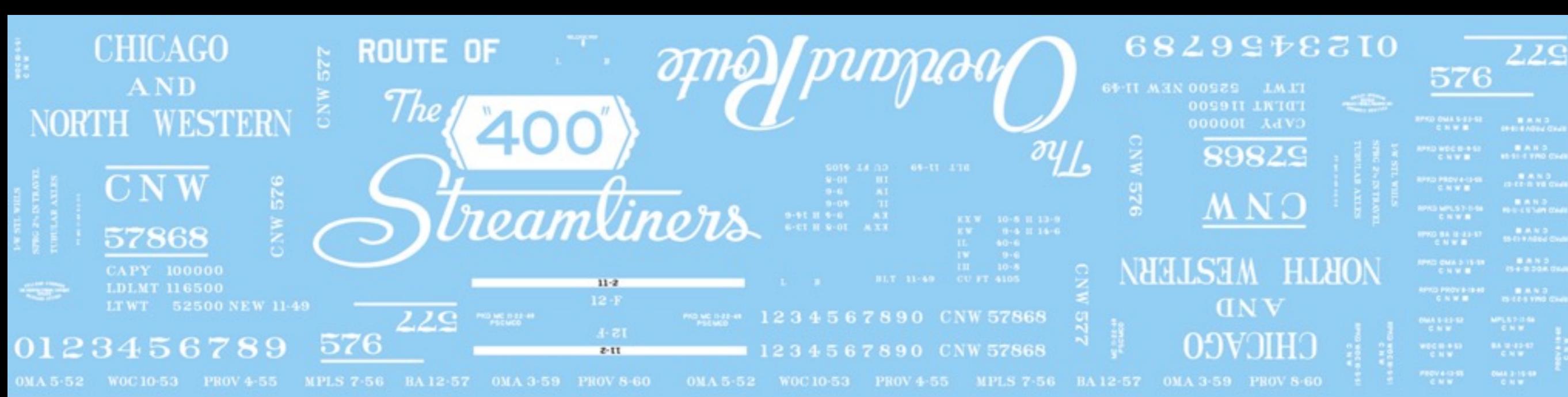
Chicago and North Western riveted PS-1 Auto Car

- 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



New Haven 10'0" inside height PS-1 box car



New Haven 10'0" inside height PS-1 box car

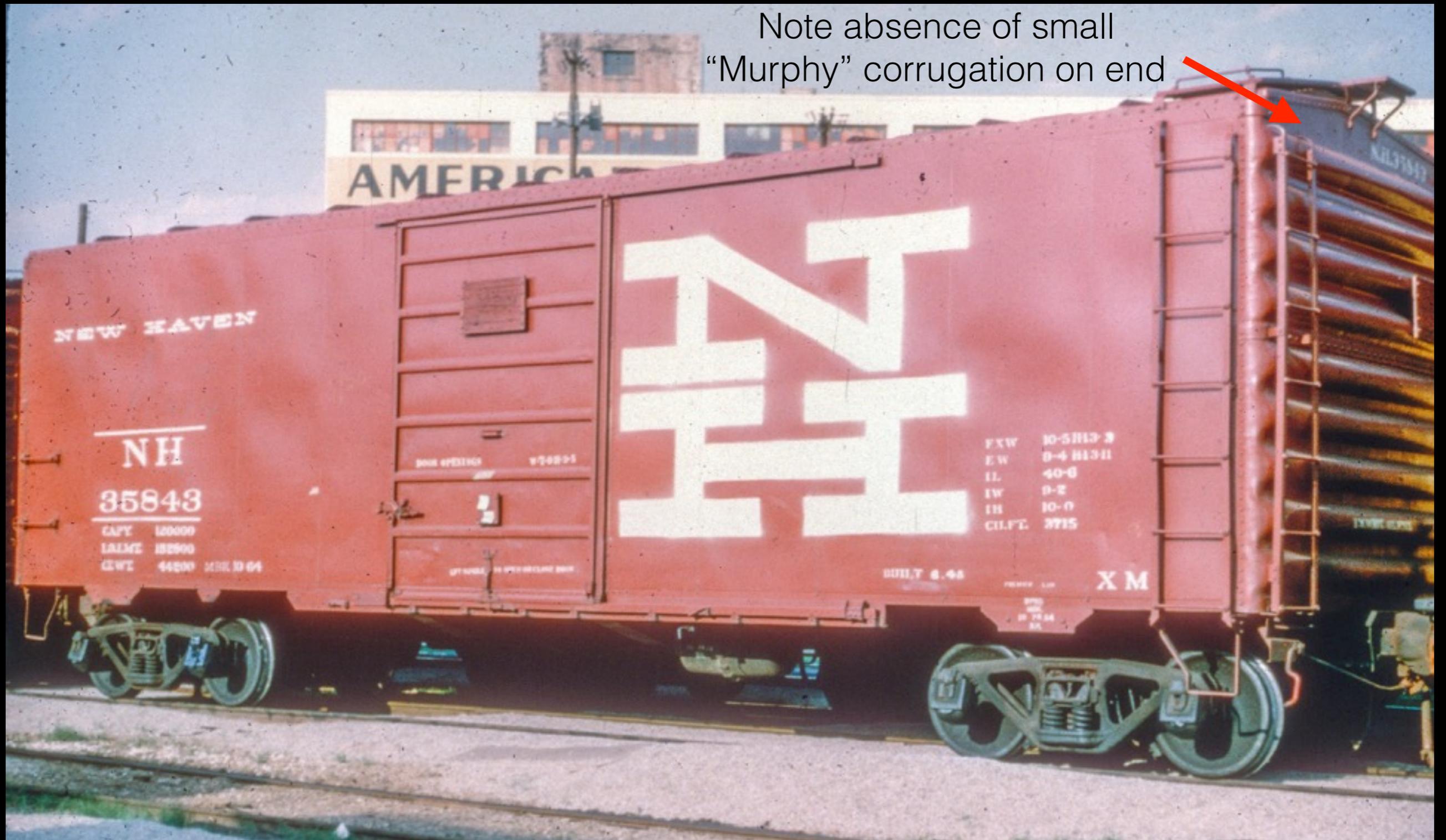
- Above is a 10'6" PS-1 with top end "Murphy" corrugation and full height door



Note shorter (height) of top panel of door

New Haven 10'0" inside height PS-1 box car

Note absence of small
"Murphy" corrugation on end



New Haven 10'0" inside height PS-1 box car



New Haven 10'0" inside height PS-1 box car



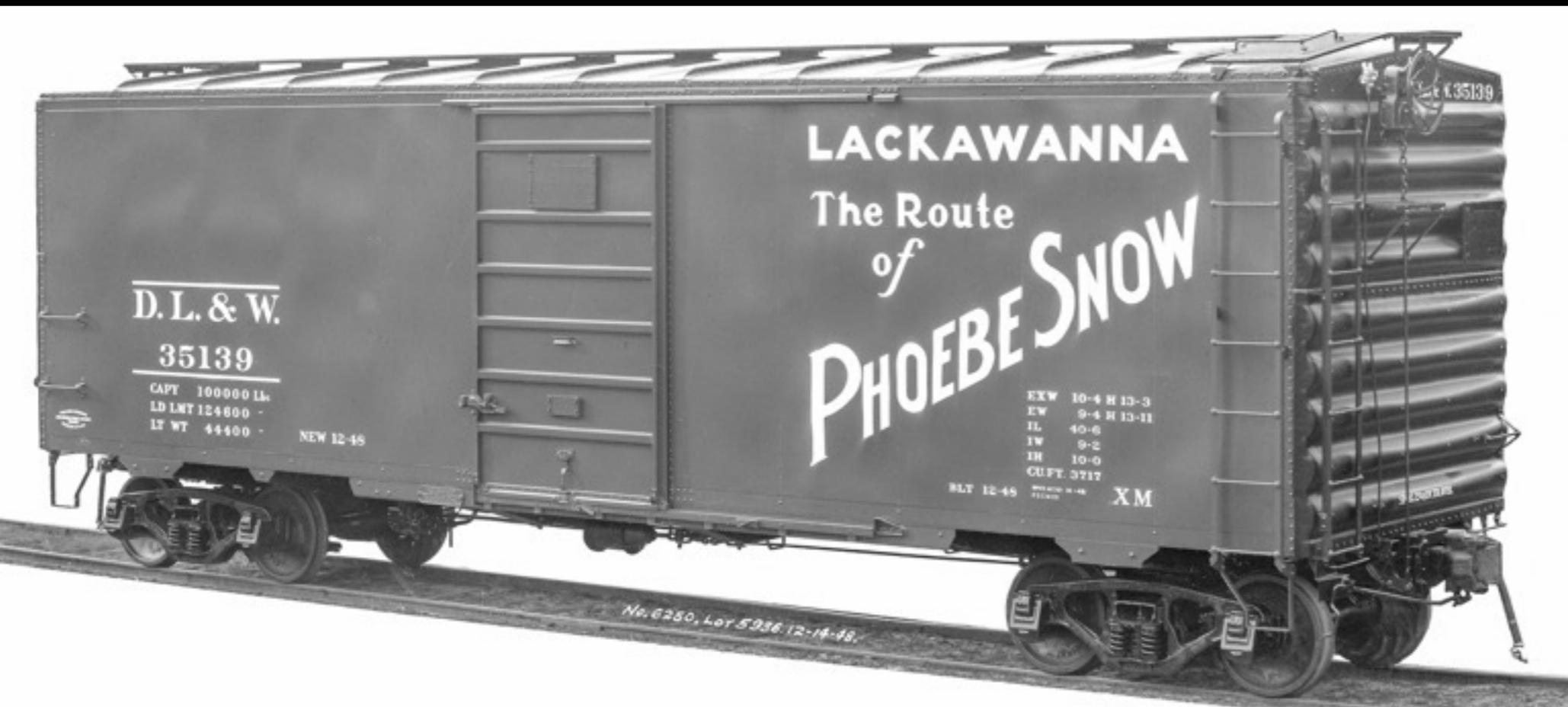
New Haven 10'0" inside height PS-1 box car

- Modified PS-1 end (Intermountain or Kadee)
- Modified Intermountain or scratchbuilt side (styrene with Archer panel line decals)
- Modified Southwest Scale door
- Intermountain roof with outer panel ribs removed

Louisville, New Albany & Corydon
ex-New Haven 10'0" inside height PS-1 box car



10'0" inside height PS-1 box cars



DL&W,
built 1948,
Pullman-
Standard



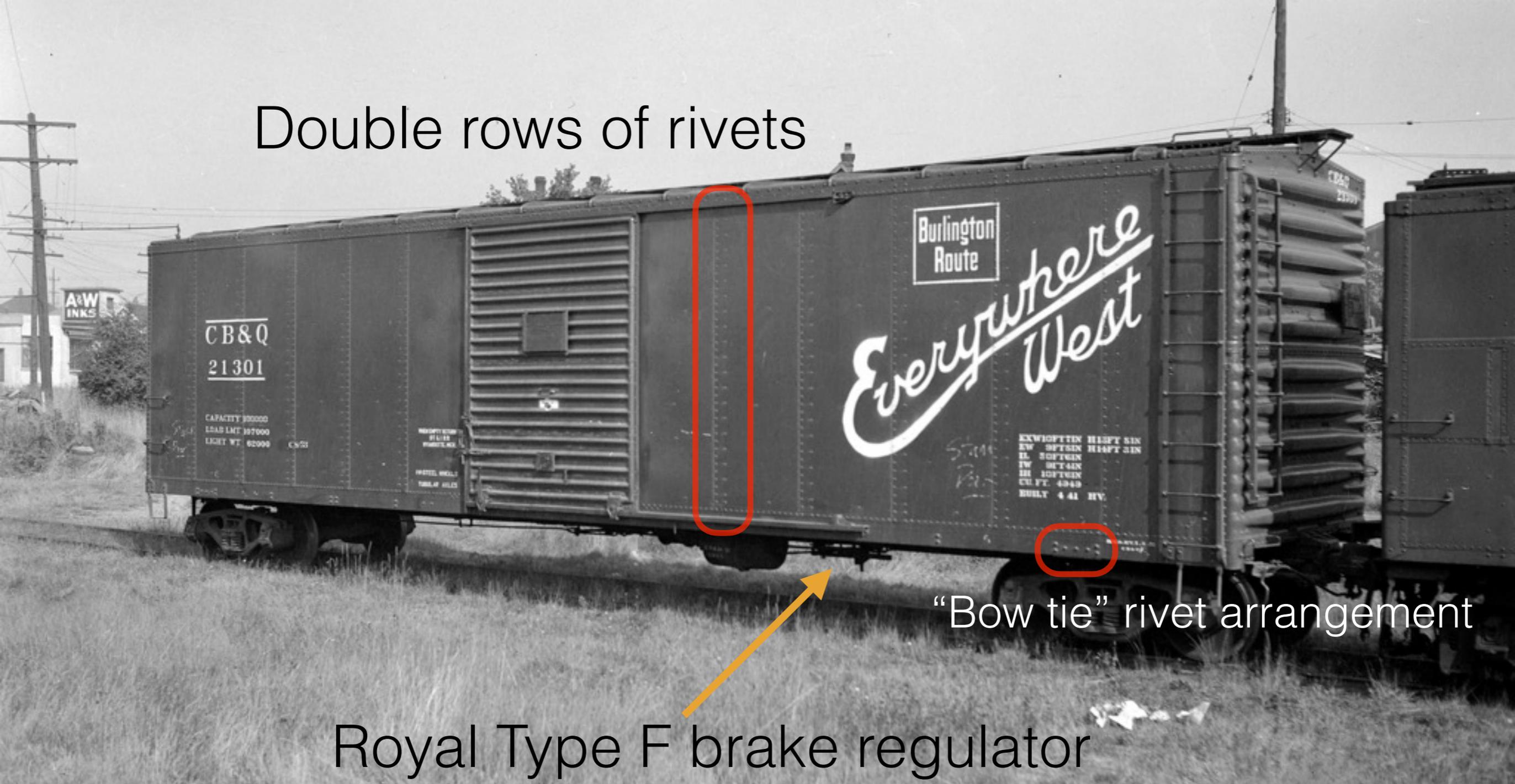


10'0" inside height
PS-1 box cars

B&O M-67,
built 1957,
B&O shops



Double rows of rivets



“Bow tie” rivet arrangement

Royal Type F brake regulator

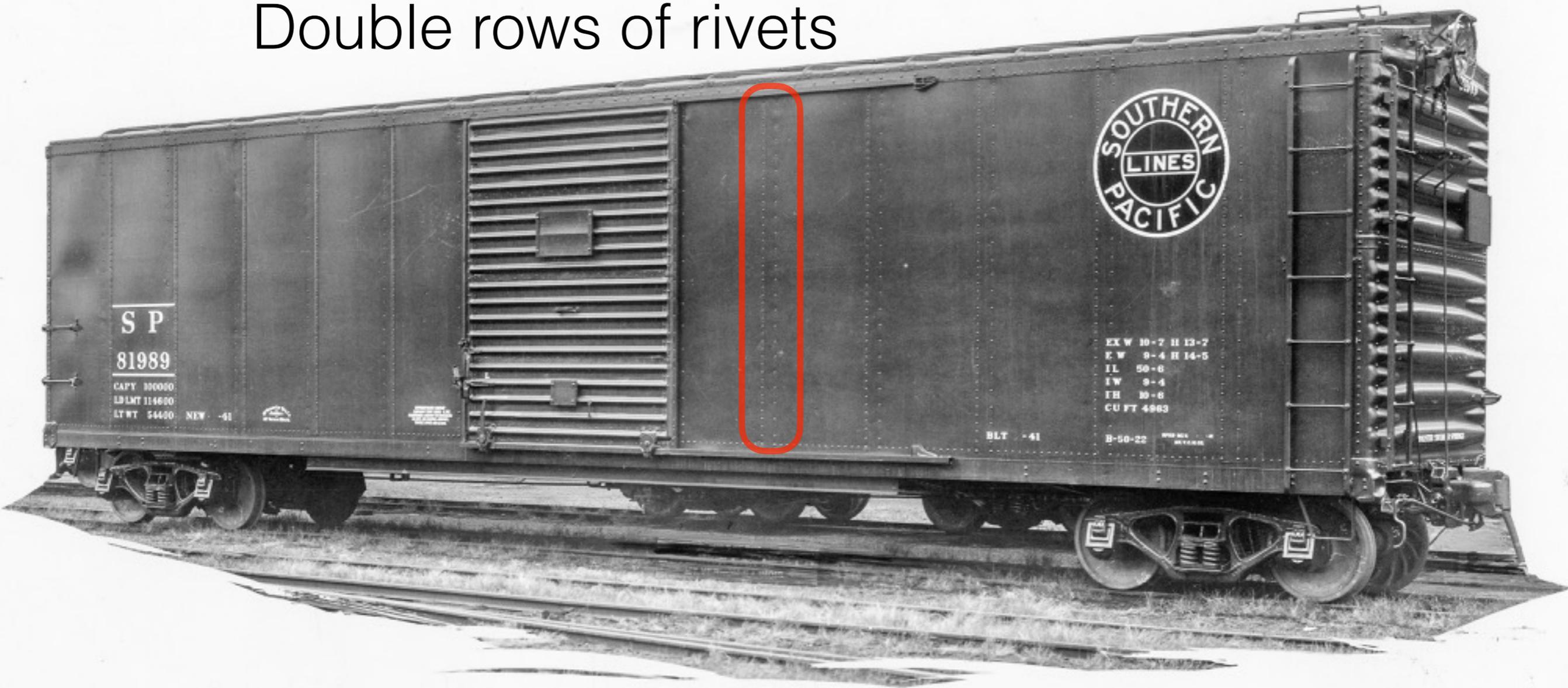
Burlington 50' AAR box car



Burlington 50' AAR box car

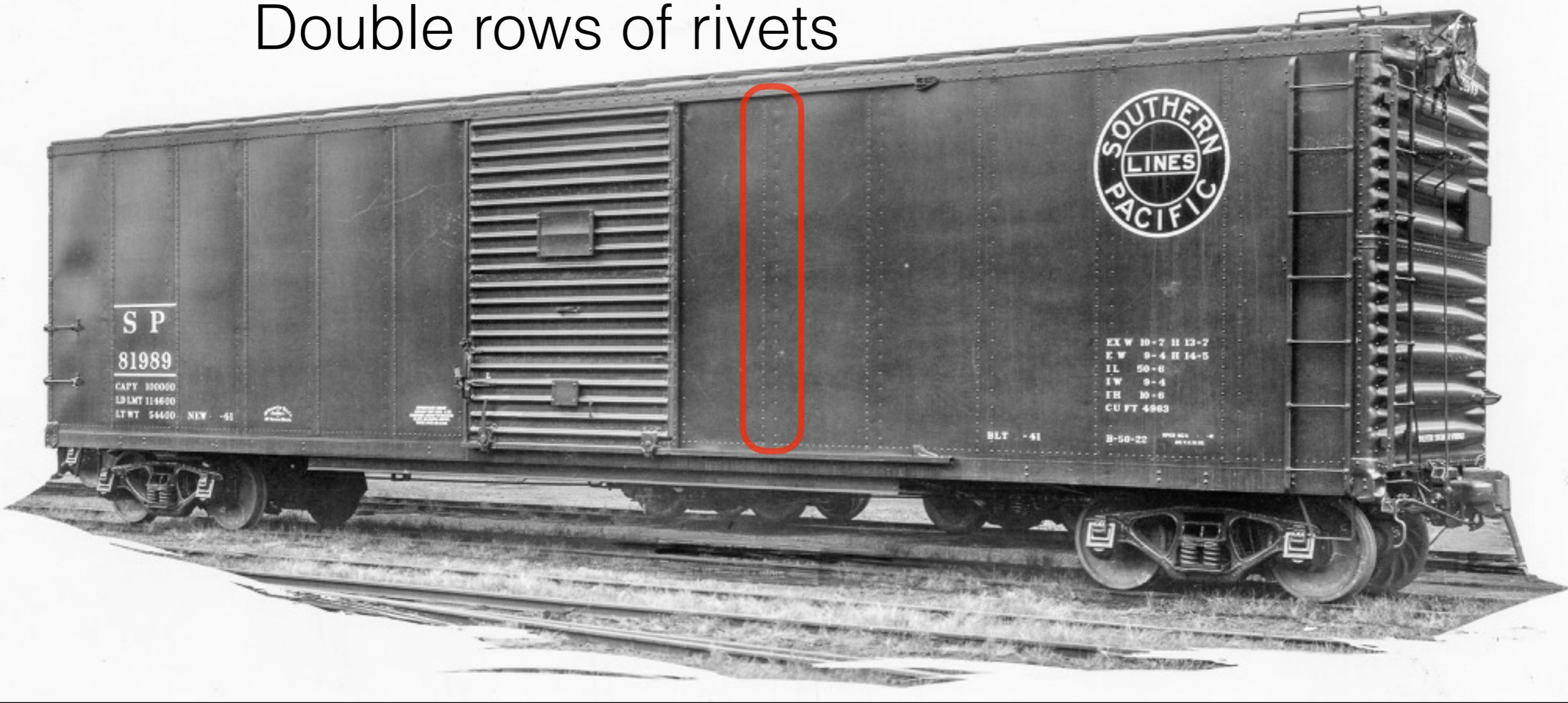
- Proto 2000 car
- “Clean” side and add Archer rivets (AR88110)
- Royal Type F Brake regulator ([Link to part on Shapeways](#))
- “Bow-tie” riveting at body bolsters
- Decals... old Champ, coming from Speedwitch

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)
- True Line Trains Klasing power hand brake
- Decals... coming from Speedwitch

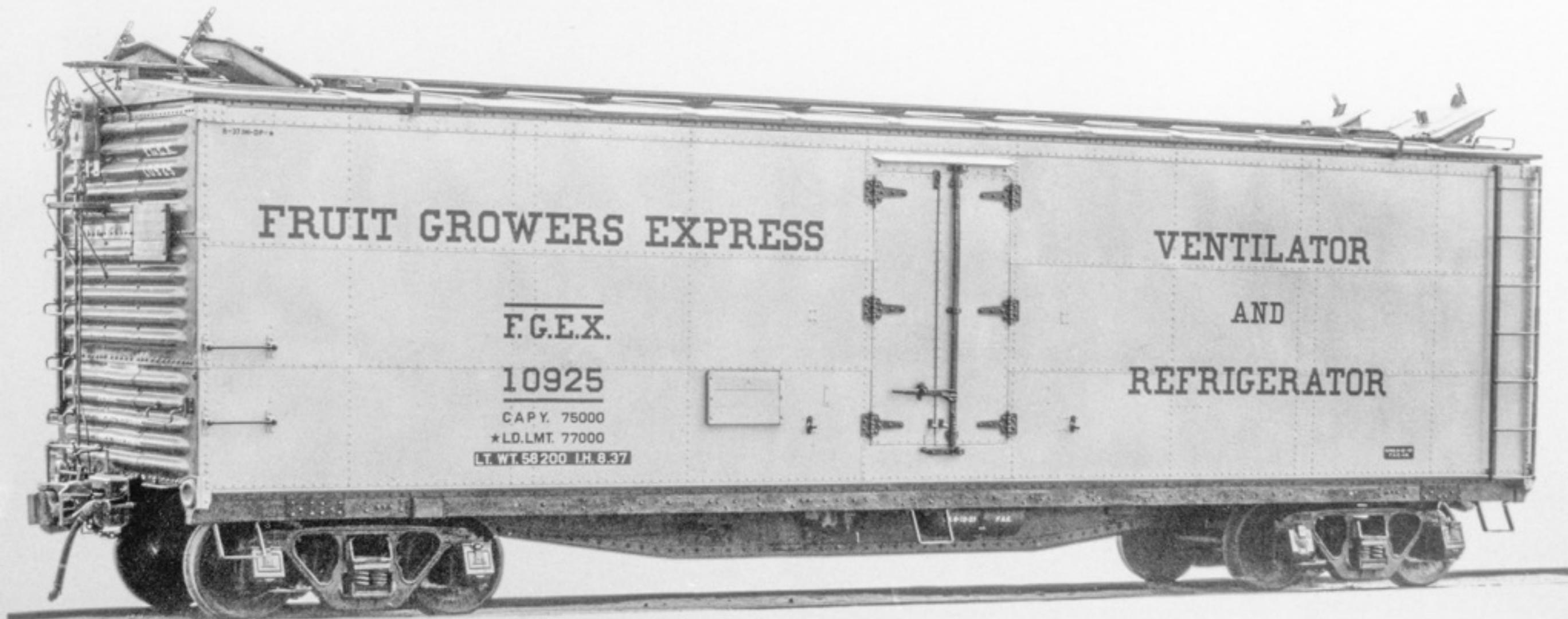


Pacific Fruit Express Plywood -9 Refurb/Rebuild



Pacific Fruit Express Plywood -9 Refurb/Rebuild

- Red Caboose R-30-12-9 (R-30-9) reefer
- Scratchbuilt sides with Grandt Line hardware, Hassler angles, joints simulated with Archer panel line decals
- Decals from Speedwitch (coming...)



Fruit Growers Express Rebuilt Refrigerator Car



Fruit Growers Express Rebuilt Refrigerator Car

- Scratchbuilt side (styrene with Archer rivet decals) plus Grandt Line hardware (hinges, door locking bar, etc.) and side sills
- Tichy ends
- Accurail FGEX roof and USRA 40-ton underframe
- Speedwitch decals... coming



Fruit Growers Express/National Car R7 underframe
Refrigerator Car



Fruit Growers Express/National Car R7 underframe
Refrigerator Car



Fruit Growers Express/National Car R7 underframe Refrigerator Car

- Scratchbuilt side (styrene with Archer rivet decals) plus Grandt Line hardware (hinges [note “double-tongue” hinges with half removed], door locking bar, etc.), side sills, and ends
- Intermountain FGEX roof
- Westerfield X23/X25/R7 underframe
- Speedwitch decals... coming



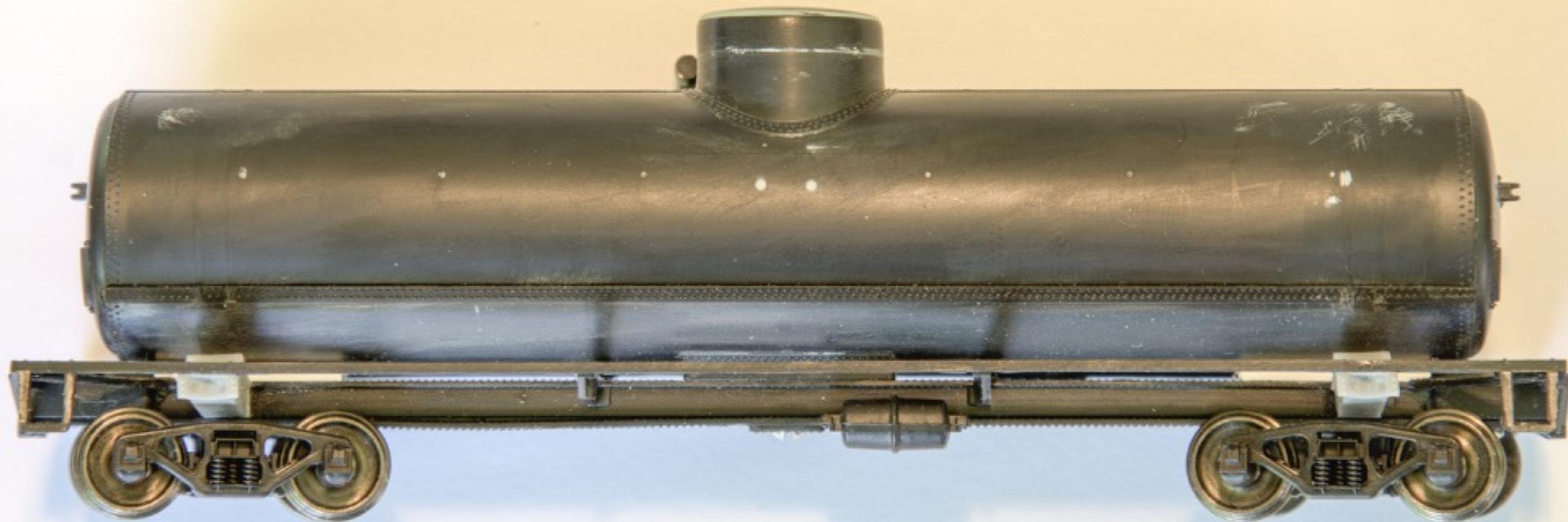
Southern Pacific O-50-13 and Union Pacific O-50-6
GATC Type 30 (Type 40) 12,500 gallon tank cars

- Athearn tank car (an Athearn car we can use!) with dome modification
- GATC Type 30 body bolsters (Speedwitch)
- Yarmouth Model Works sill steps (YMW-220)
- decals coming from Speedwitch



Southern Pacific O-50-13 and Union Pacific O-50-6 GATC Type 30 (Type 40) 12,500 gallon tank cars

- Increase in dome height using a sacrificial Athearn tank (if you're making multiples sacrifice a "three-dome" [three-compartment] car)
- Remove rivets and other unwanted details



Southern Pacific O-50-13 and Union Pacific O-50-6
GATC Type 30 (Type 40) 12,500 gallon tank cars

- Speedwitch GATC Type 30 bolsters
- Precision Scale brass tank handrail stanchions
- Replace AB brake system (to be done)
- Yarmouth Model Works etched sill steps (YMW-220)



Mather box car



Mather box car



Mather box car



Mather box car

- Hassler-Profile channel, angle, and zee-bar sections for scratchbuilt sides
- Proto 2000 roof
- Scratchbuild underframe

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

Tools

- A *GOOD* mitre box and saw
- Saw handle and blades from UMM-USA (not for the mitre box)
- 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

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This will be posted to prototopics.blogspot.com

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