

Finding Kitbashing Opportunities

This will be posted to prototopics.blogspot.com

Finding Kitbashing Opportunities in Freight Cars

Ted Culotta

RPM Chicagoland
Lisle, IL
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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



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

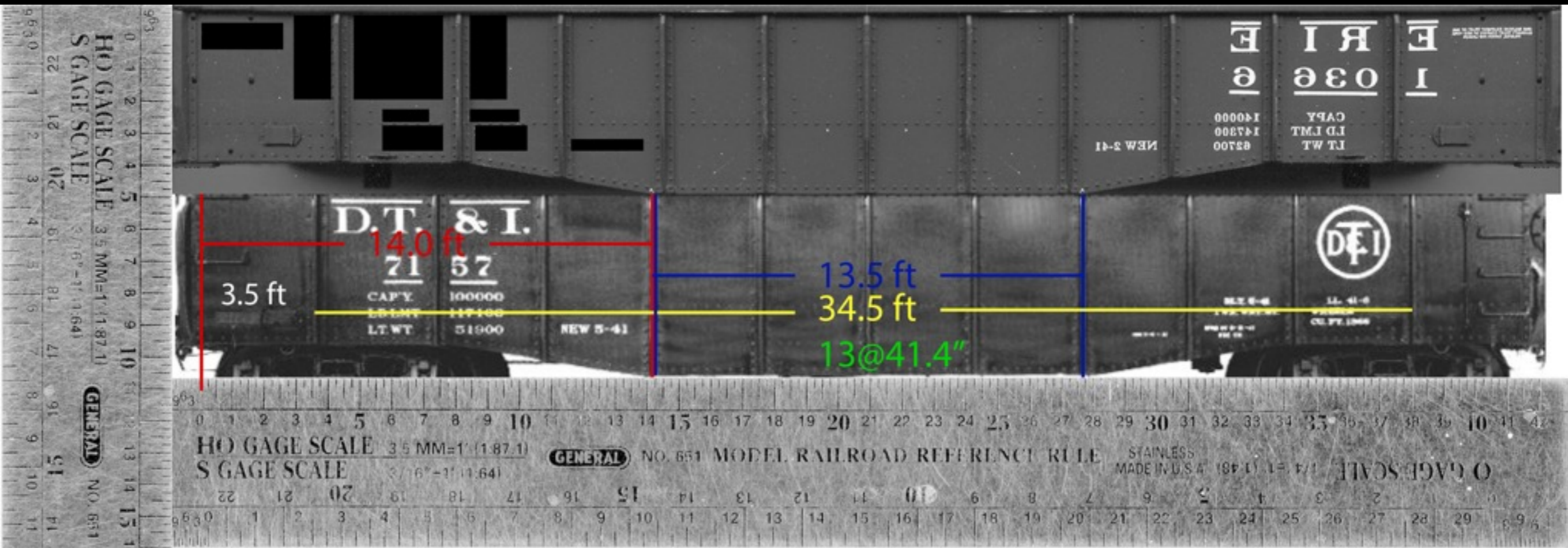


New Haven 10'0" inside height PS-1 box car

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

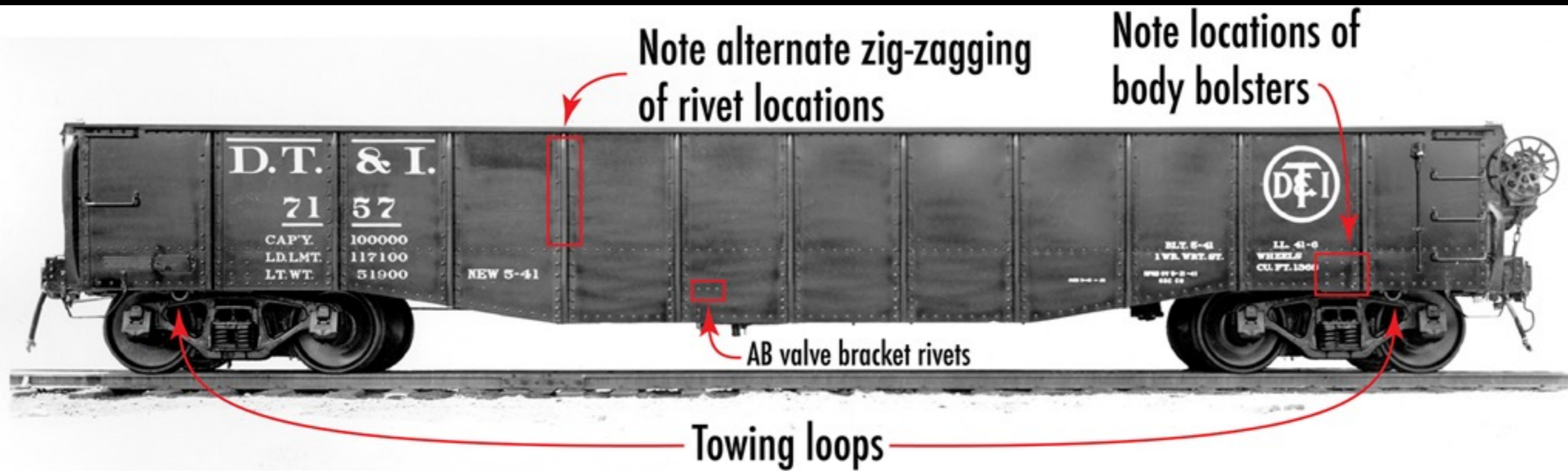


Detroit, Toledo & Ironton 41' Greenville Gondola



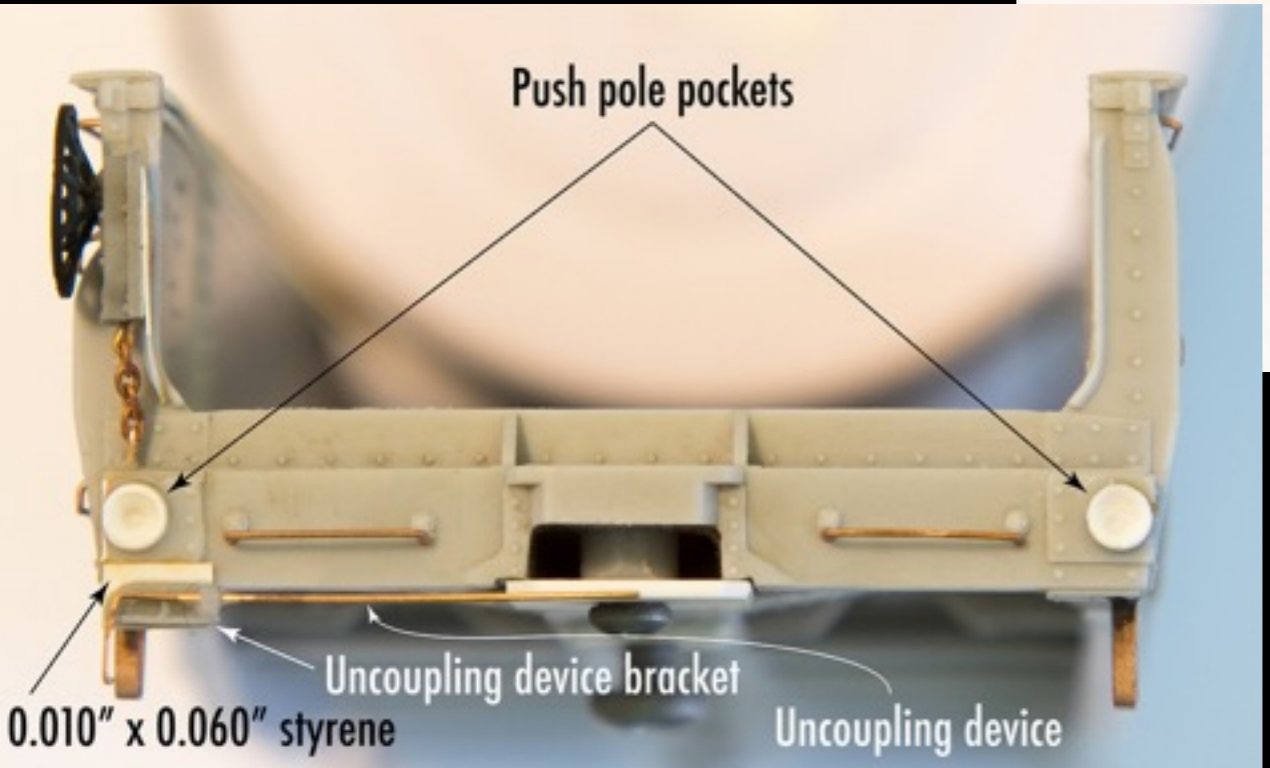
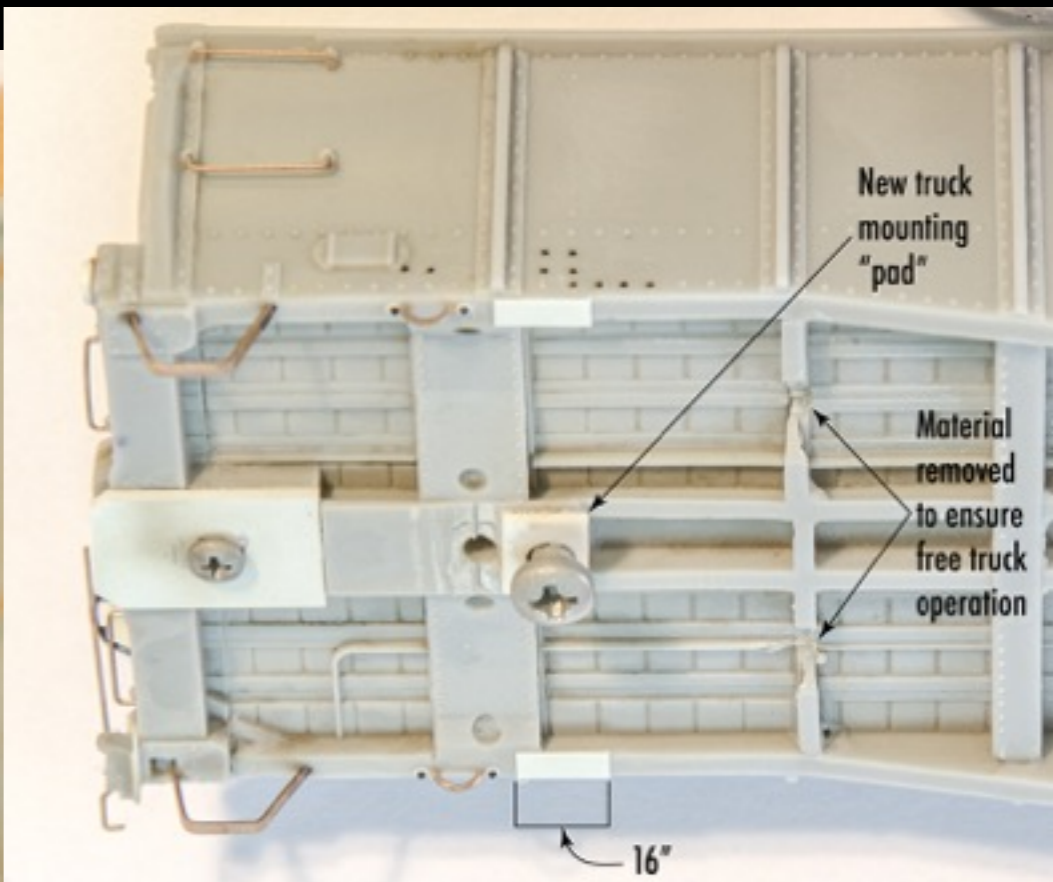
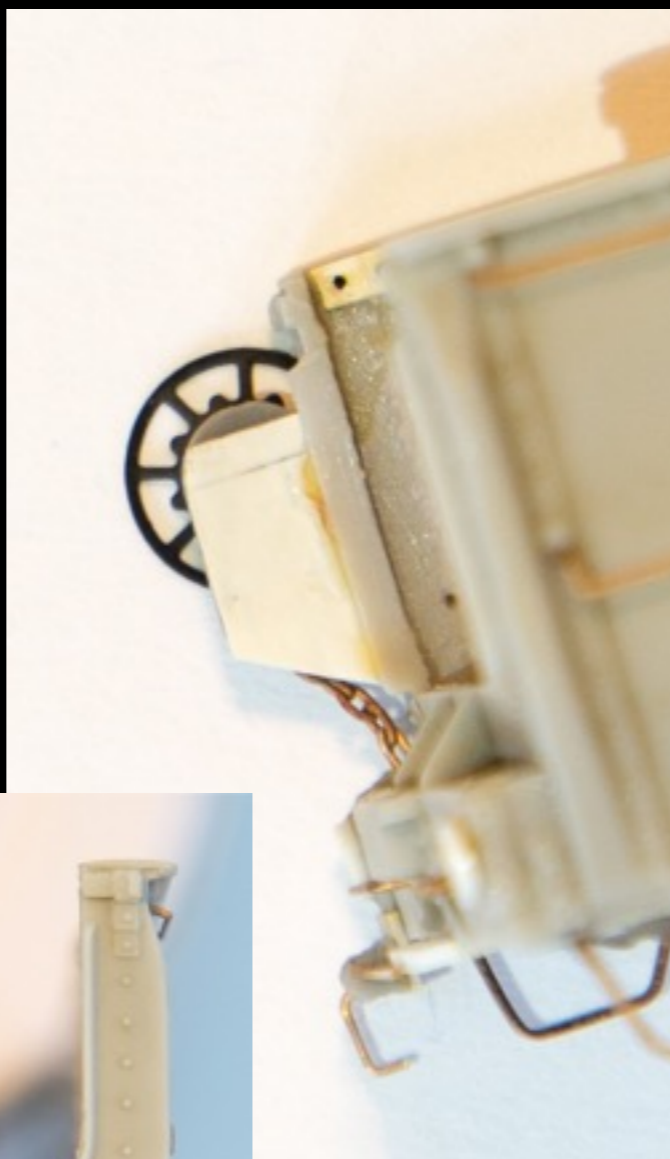
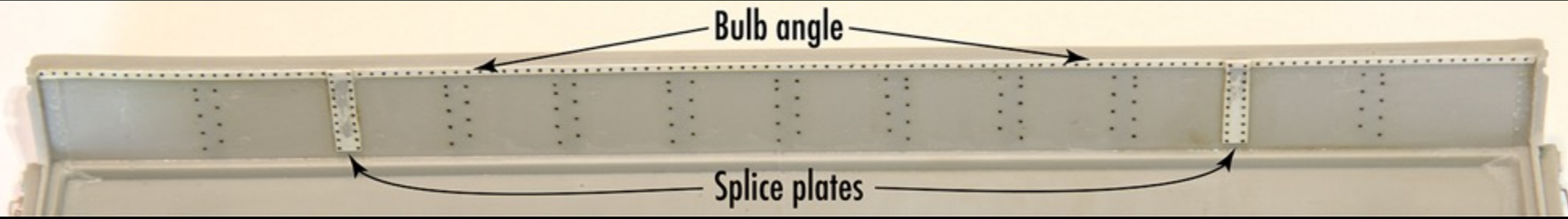
Detroit, Toledo & Ironton 41' Greenville Gondola

- 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



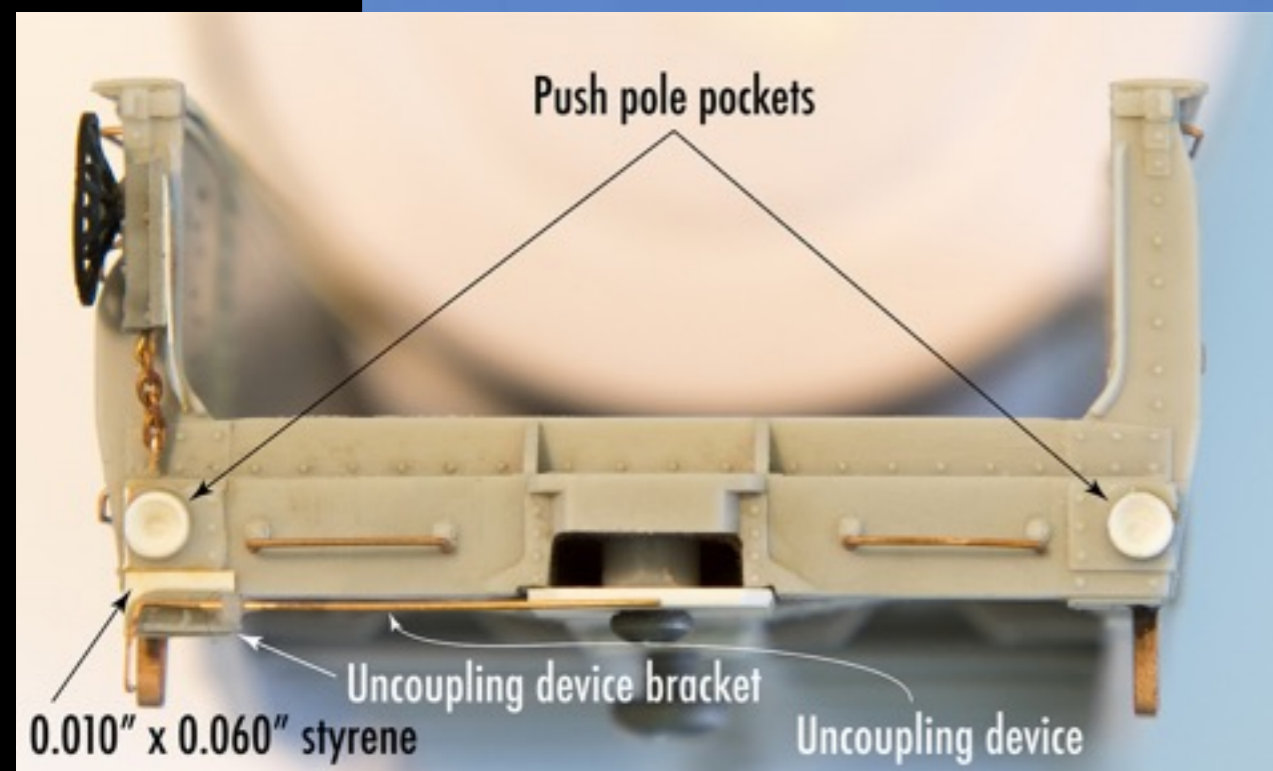
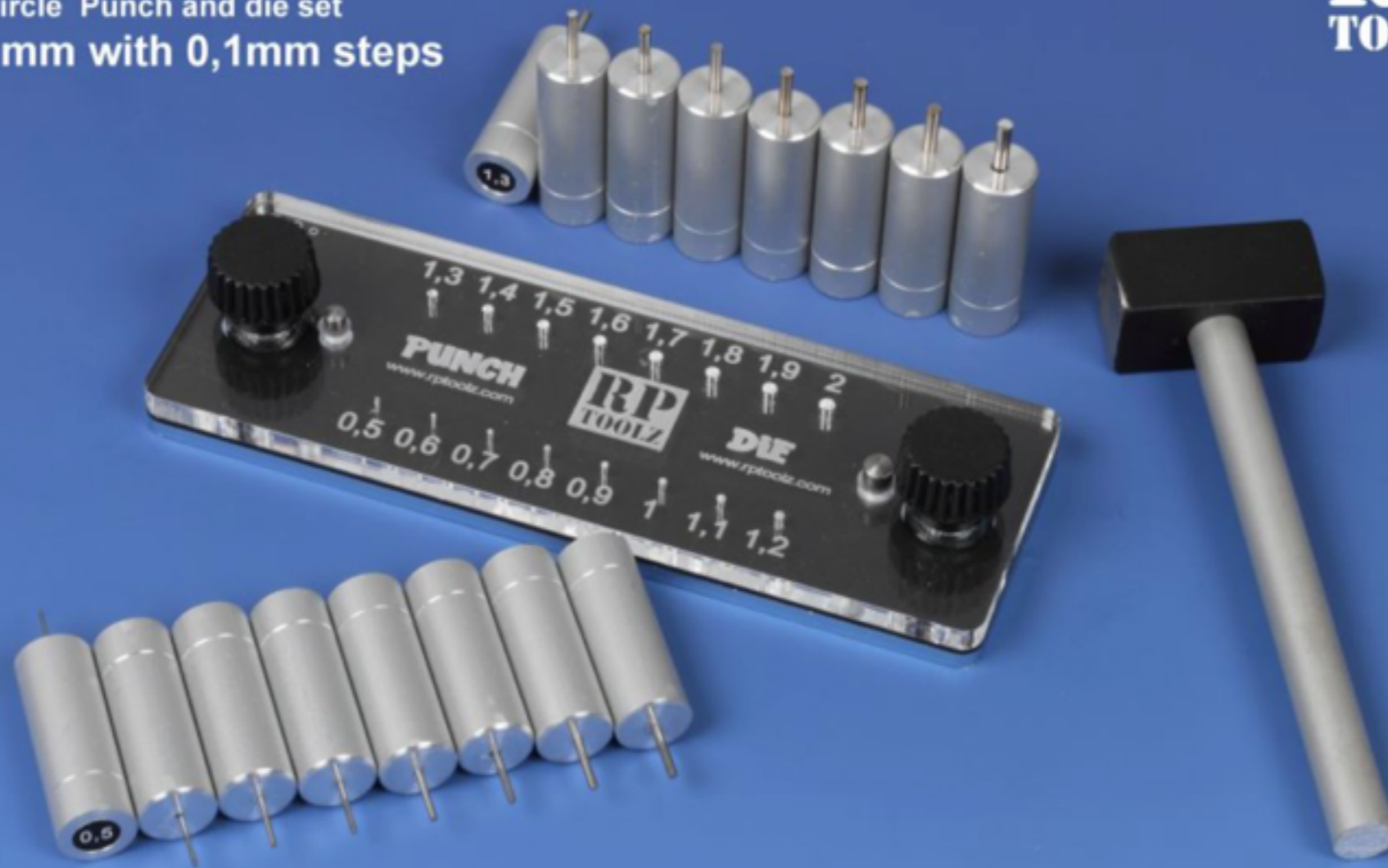
Detroit, Toledo & Ironton
41' Greenville Gondola

Punch and die set

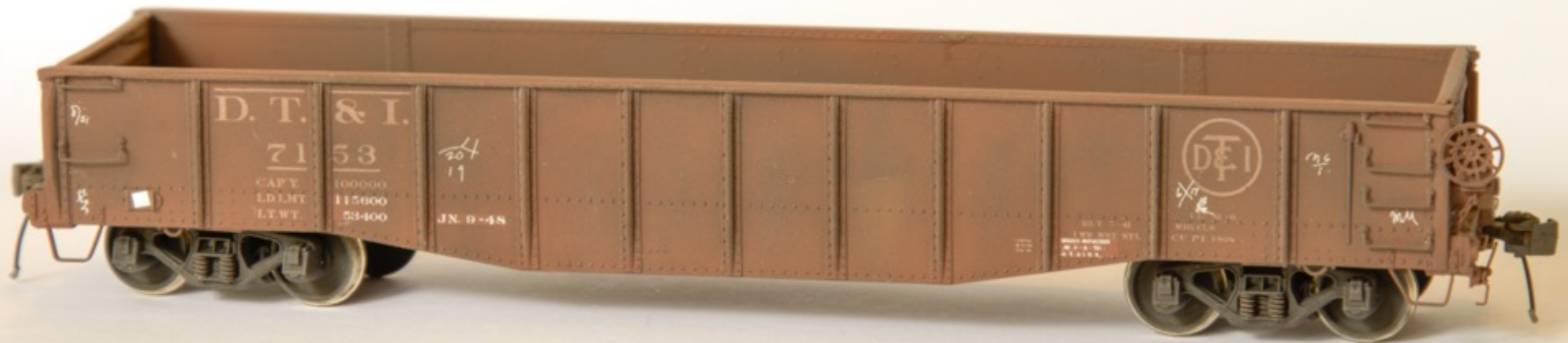
Small circle Punch and die set
0,5-2 mm with 0,1mm steps

○○○

RP
TOOLZ



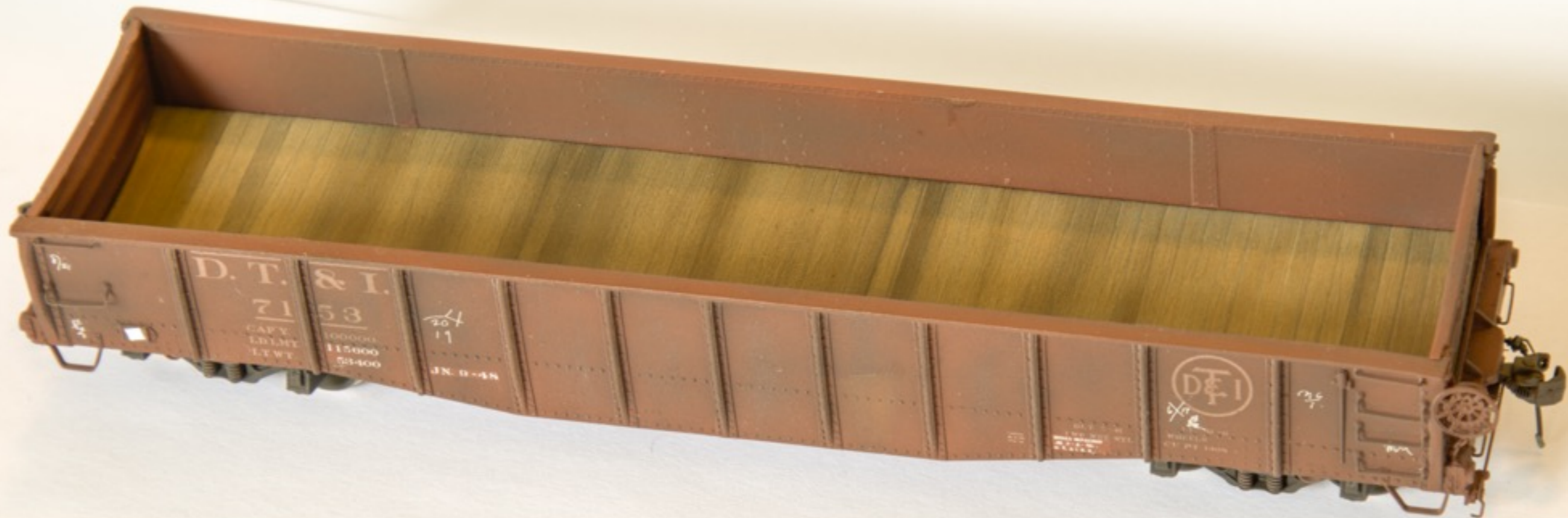
Detroit, Toledo & Ironton
41' Greenville Gondola



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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Elgin, Joliet & Eastern 10'0" inside height 12-panel postwar AAR box car



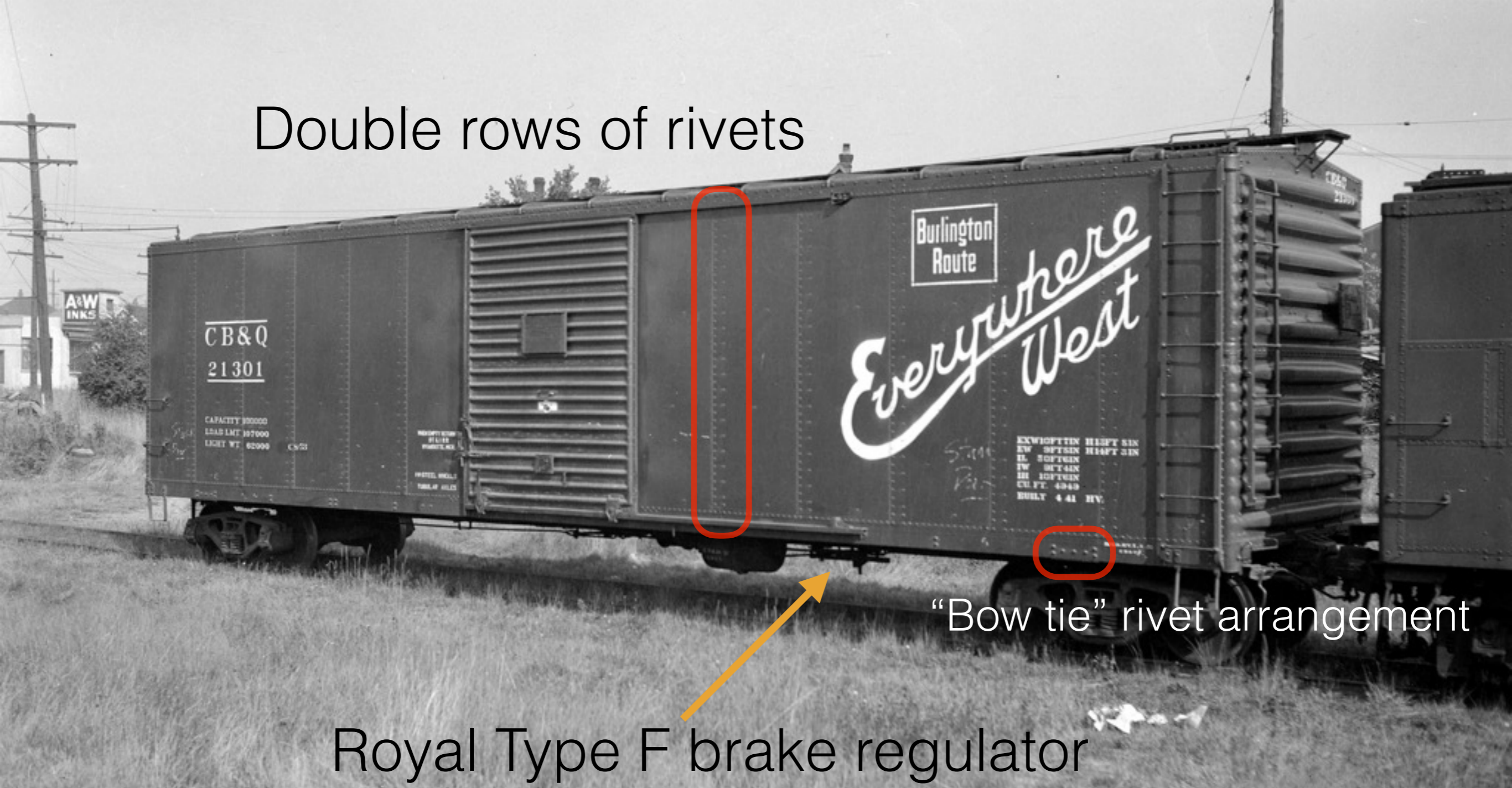
Elgin, Joliet & Eastern 10'0" inside height 12-panel postwar AAR box car



Elgin, Joliet & Eastern 10'0" inside height 12-panel postwar AAR box car

- Modified Intermountain R-40-25 ends (3/3 to 3/4)
- Modified C&BT side or scratchbuilt (styrene with Archer panel line decals)
- Modified Southwest Scale door
- Decals... old Champ, Sunshine

Double rows of rivets



“Bow tie” rivet arrangement

Royal Type F brake regulator

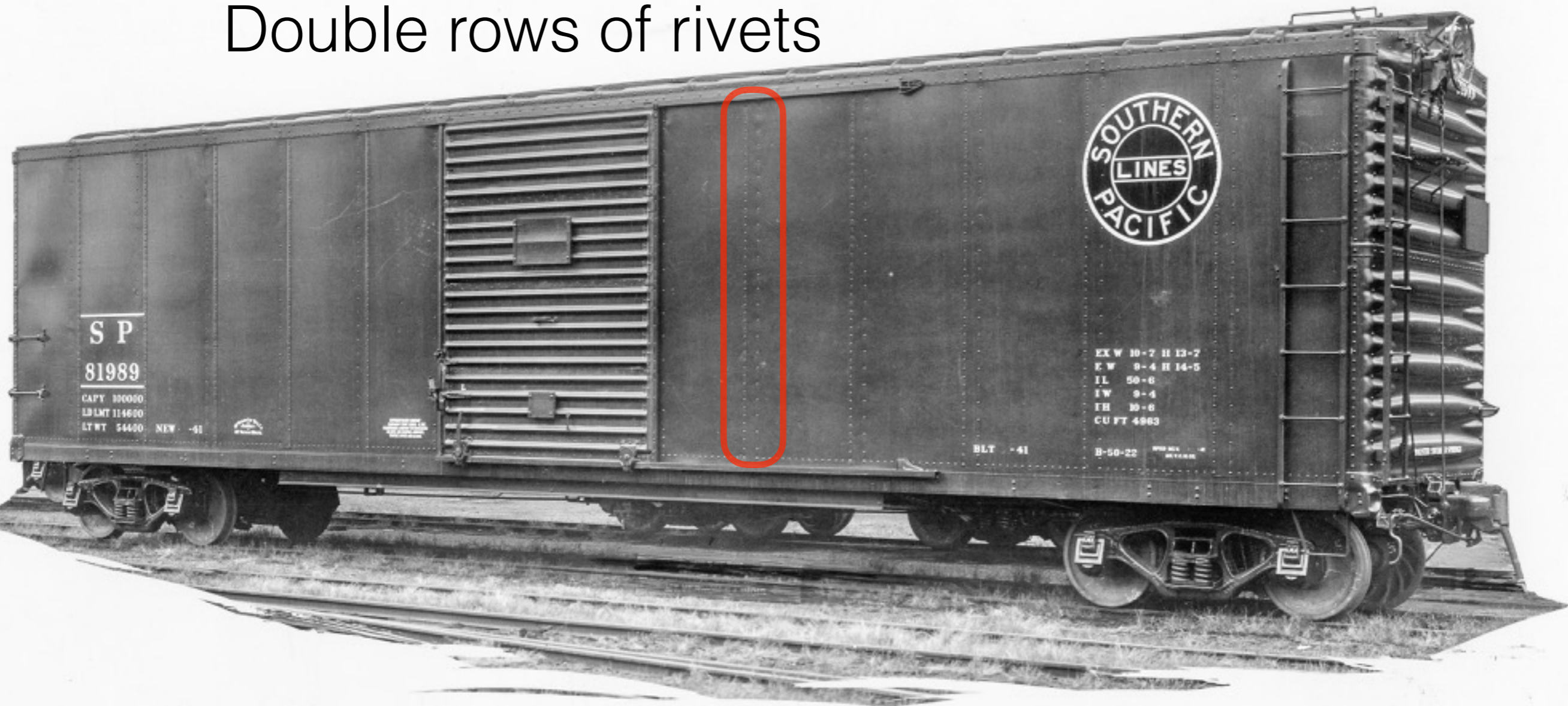
Burlington 50' AAR box car



Burlington 50' AAR box car

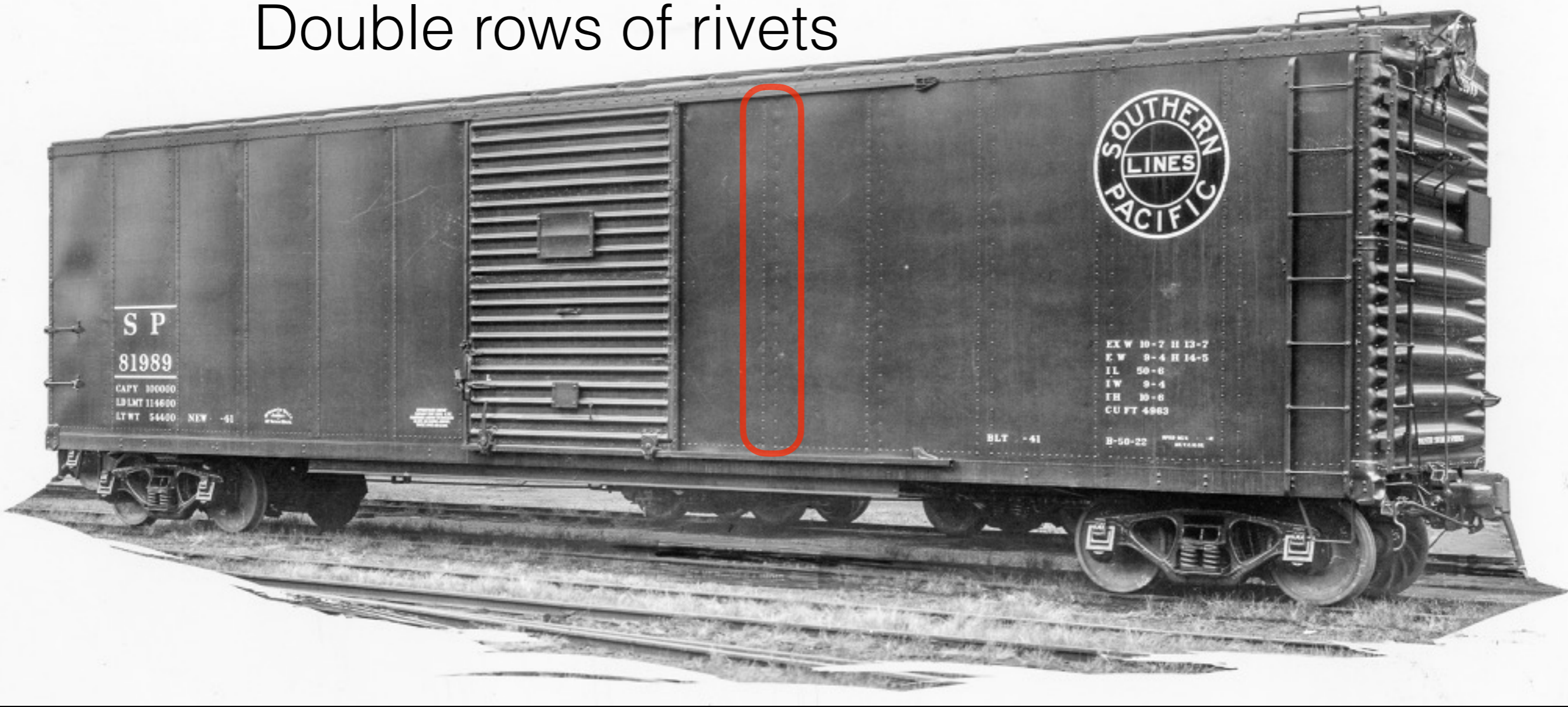
- Proto 2000 car
- “Clean” side and add Archer rivets (AR88110)
- Royal Type F Brake regulator ([Link to part on Shapeways](#))
- “Bow-tie” riveting at body bolsters
- Decals... old Champ, coming from Speedwitch

Double rows of rivets



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

Double rows of rivets

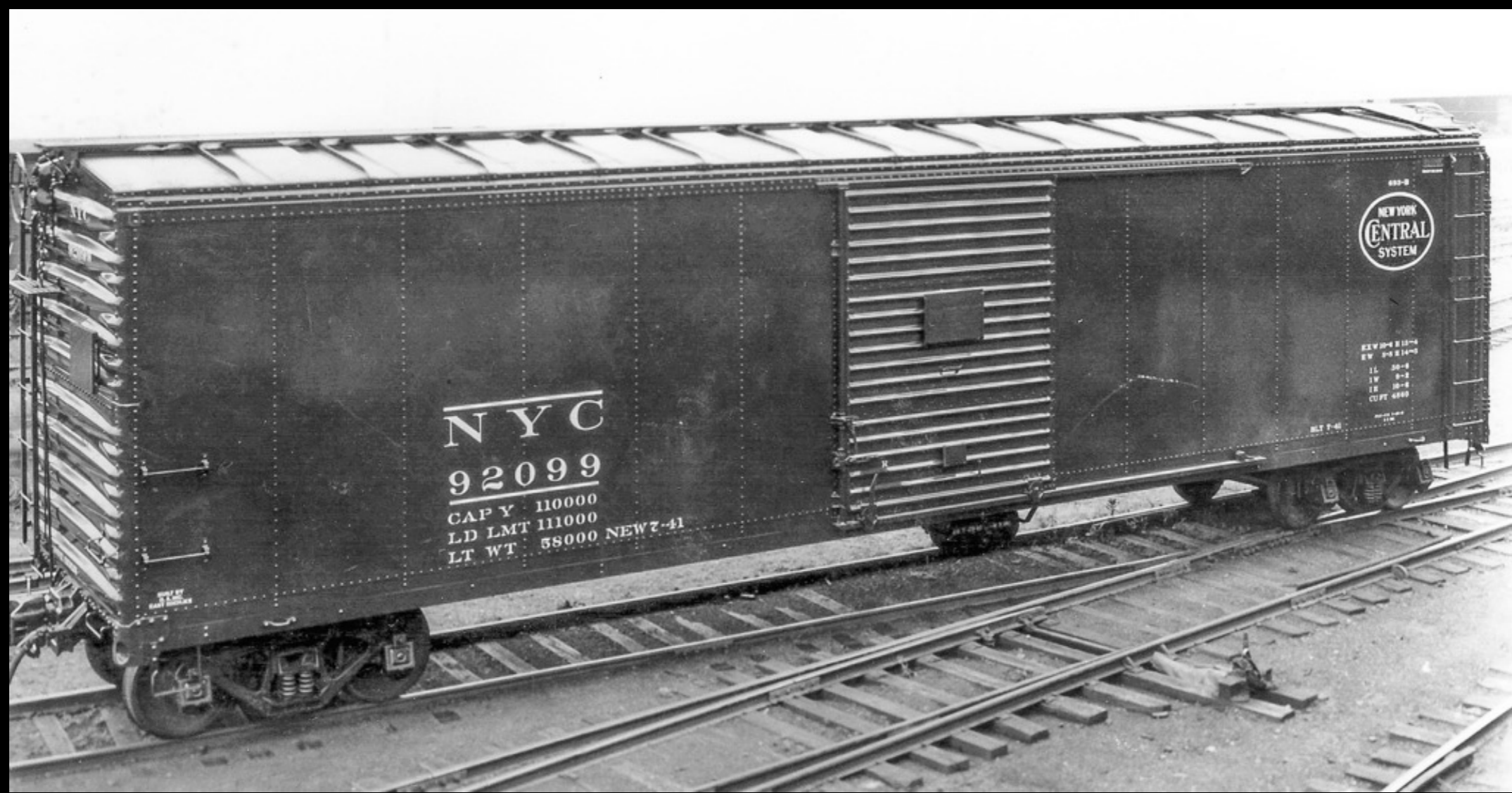


Southern Pacific B-50-22 50' AAR box car

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



New York Central 50' AAR box car with end door



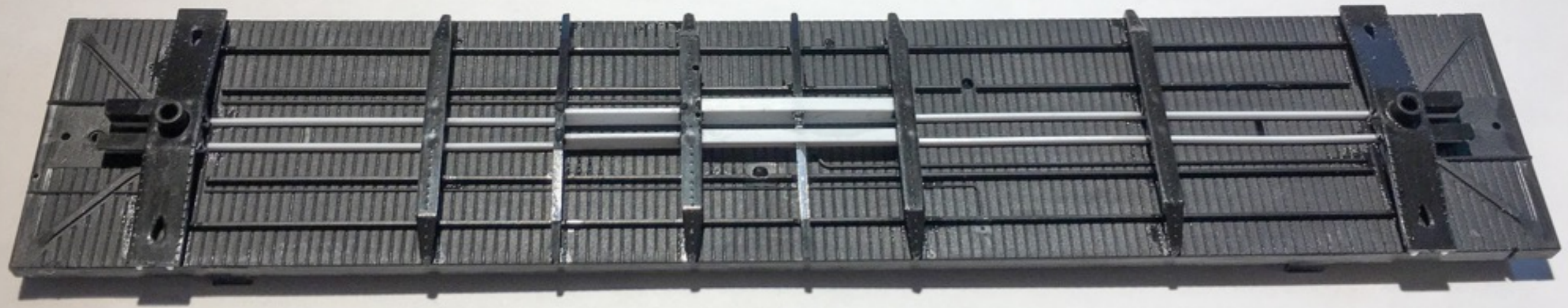
New York Central 50' AAR box car with end door

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



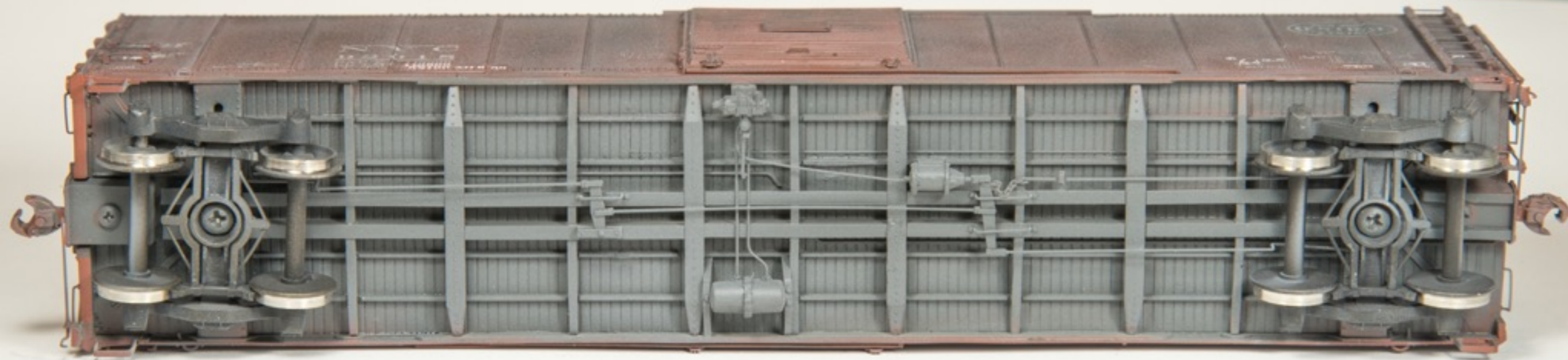
New York Central 50' AAR box car with end door

- 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

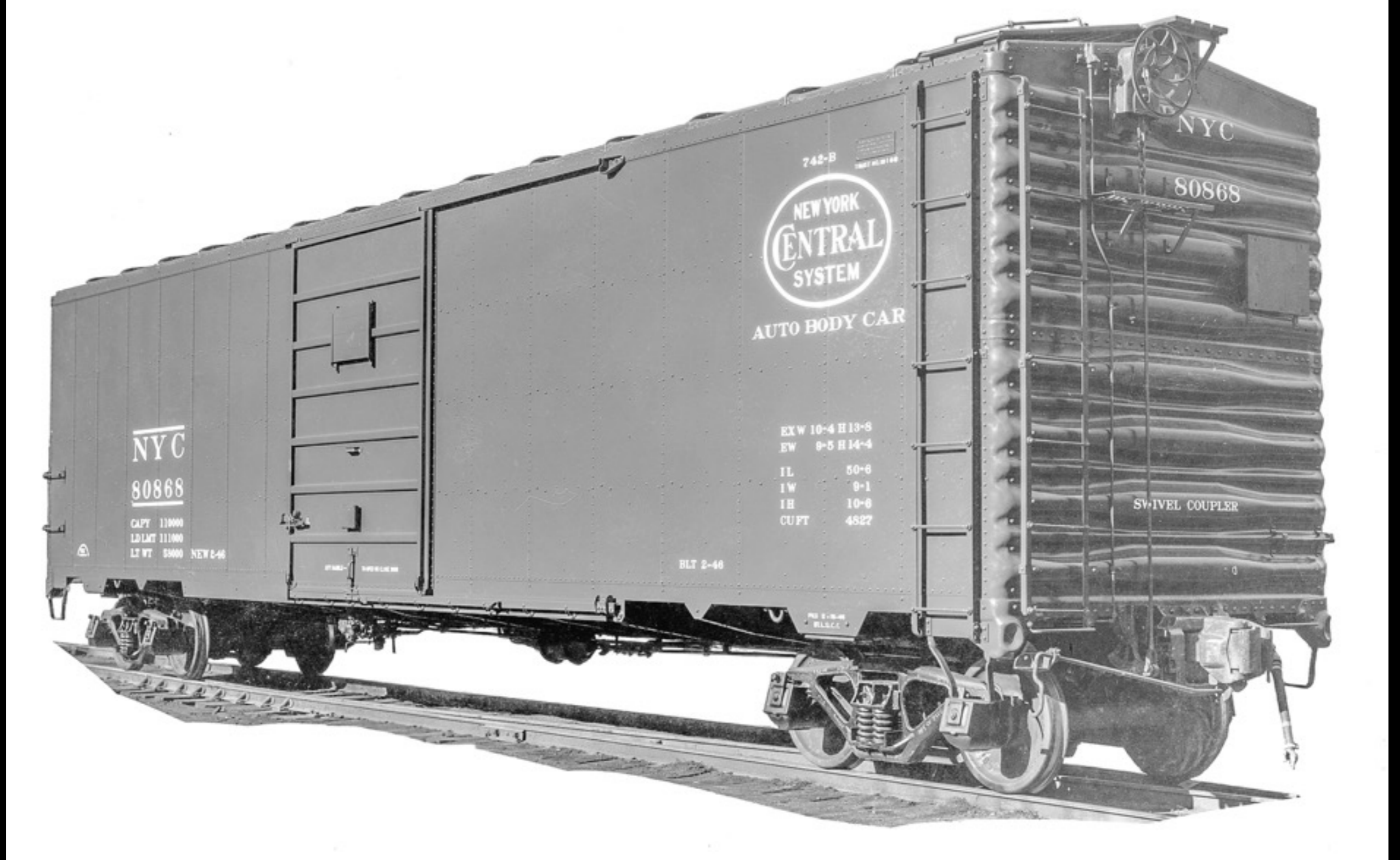
- Splice Proto 2000 box and end door auto cars
- resin Youngstown door
- bashed floor/underframe
- Tahoe Models trucks
- other details; profiled in *Prototype Railroad Modeling, Vol. Four*
- Speedwitch decals - D177



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



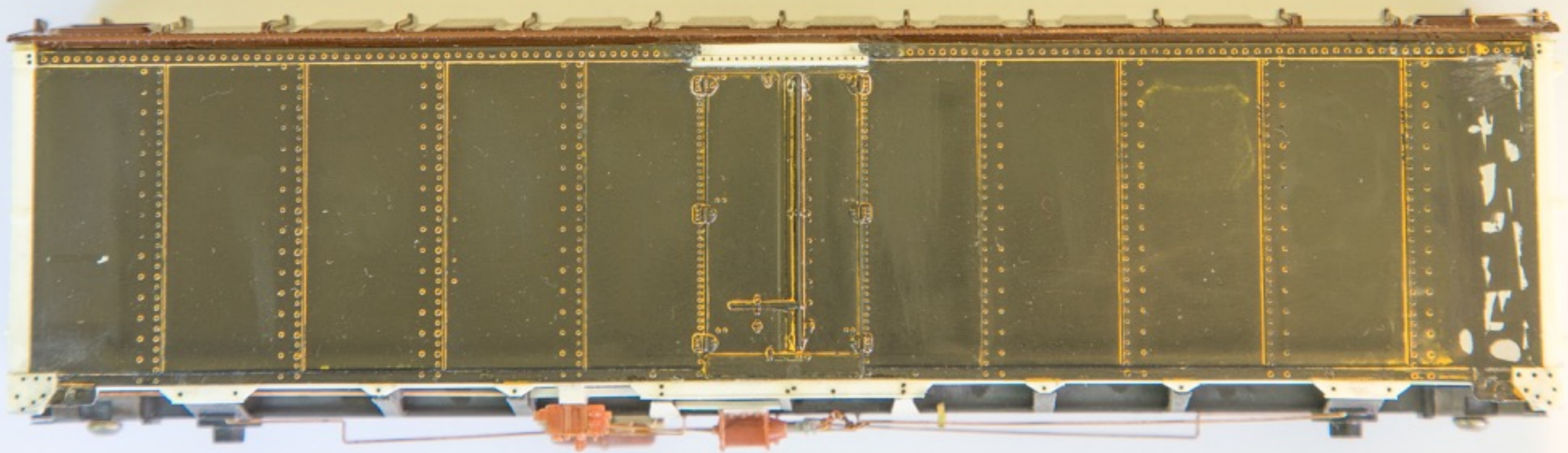
Pacific Fruit Express R-40-14

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

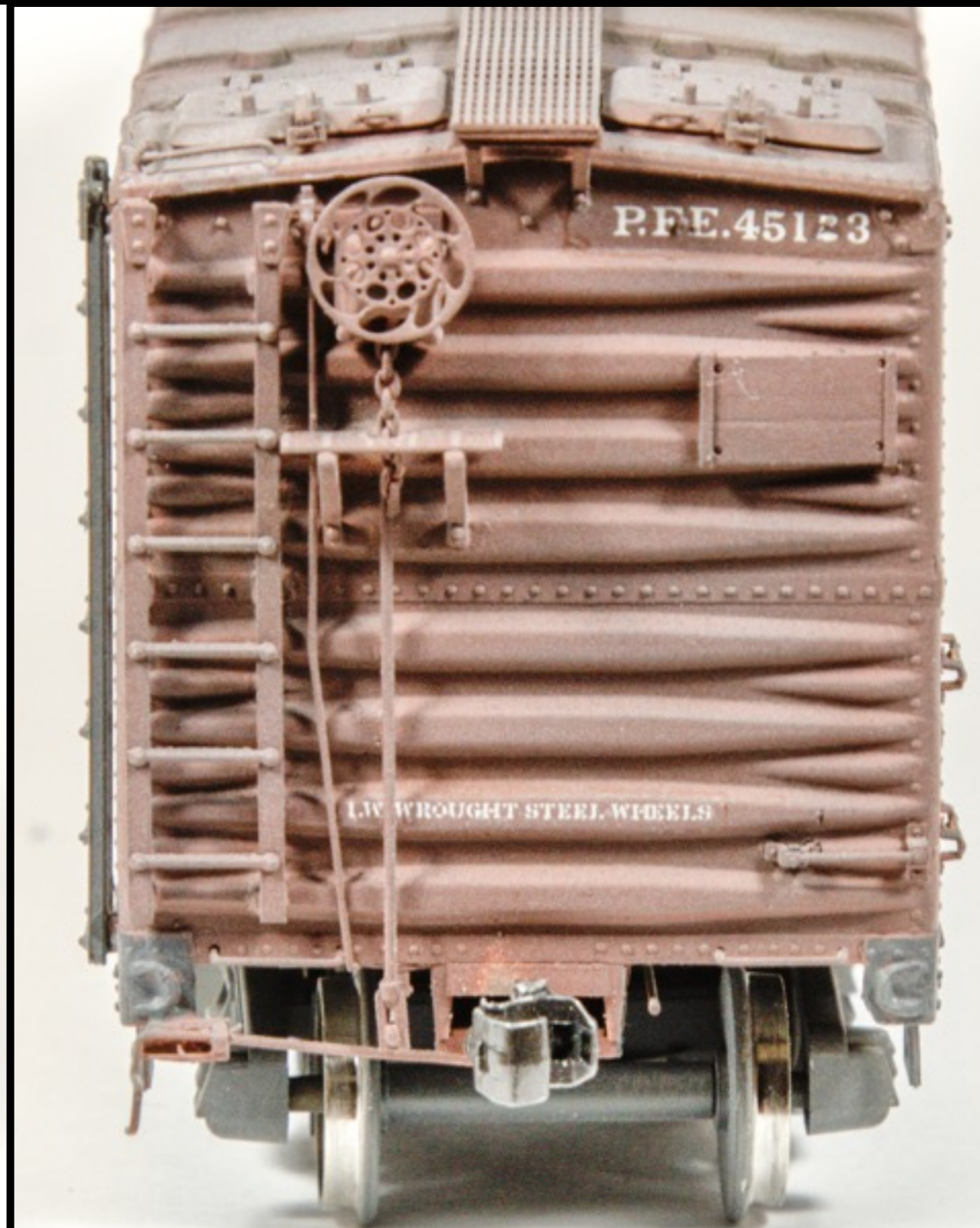
- Intermountain roof (R-40-23)
- Details West round corner Dreadnaught ends
- Tahoe Models trucks (ignore “shop” trucks shown above)
- other details
- Speedwitch decals

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



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



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



- National Car Co. (Fruit Growers) 37' Meat Reefer
- Shorten Intermountain FGEX reefer by three feet (half from each end) or scratchbuild new side from styrene, Grandt Line door hardware, etc.
 - Lower height of sides and ends by approx. 10 inches (the reason for scratchbuilding the side, if you decide to lower height)
 - Use existing IM roof and underframe, but modified
 - Decals from Speedwitch (coming...)



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



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

- Atlas 1932 ARA Box Car or Sunshine Models
- Tichy flat car
- Scratchbuilt side sill details
- Decals from Speedwitch (coming...)



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...)



Seaboard Air Line AF-4 PS-1 Auto Car



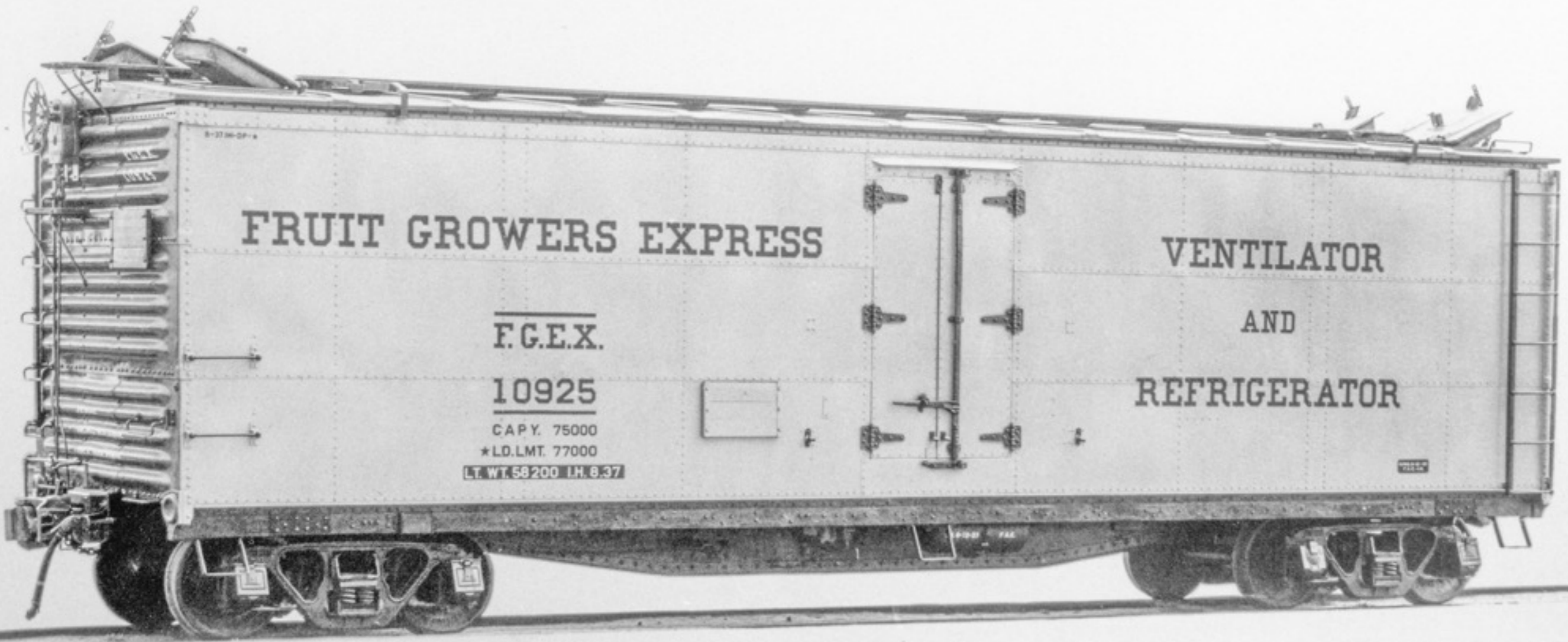
Seaboard Air Line AF-4 PS-1 Auto Car

- Modified Intermountain PS-1 end
- Modified Intermountain or scratchbuilt side (styrene with Archer panel line decals)
- Southwest Scale doors (modify left door - not shown modified above)
- Intermountain roof with outer panel ribs removed
- Scratchbuilt underframe (or just use kit underframe)
- Speedwitch decals - D194

Seaboard Air Line AF-4 PS-1 Auto Car



- Speedwitch decals - D194



Fruit Growers Express Rebuilt Refrigerator Car

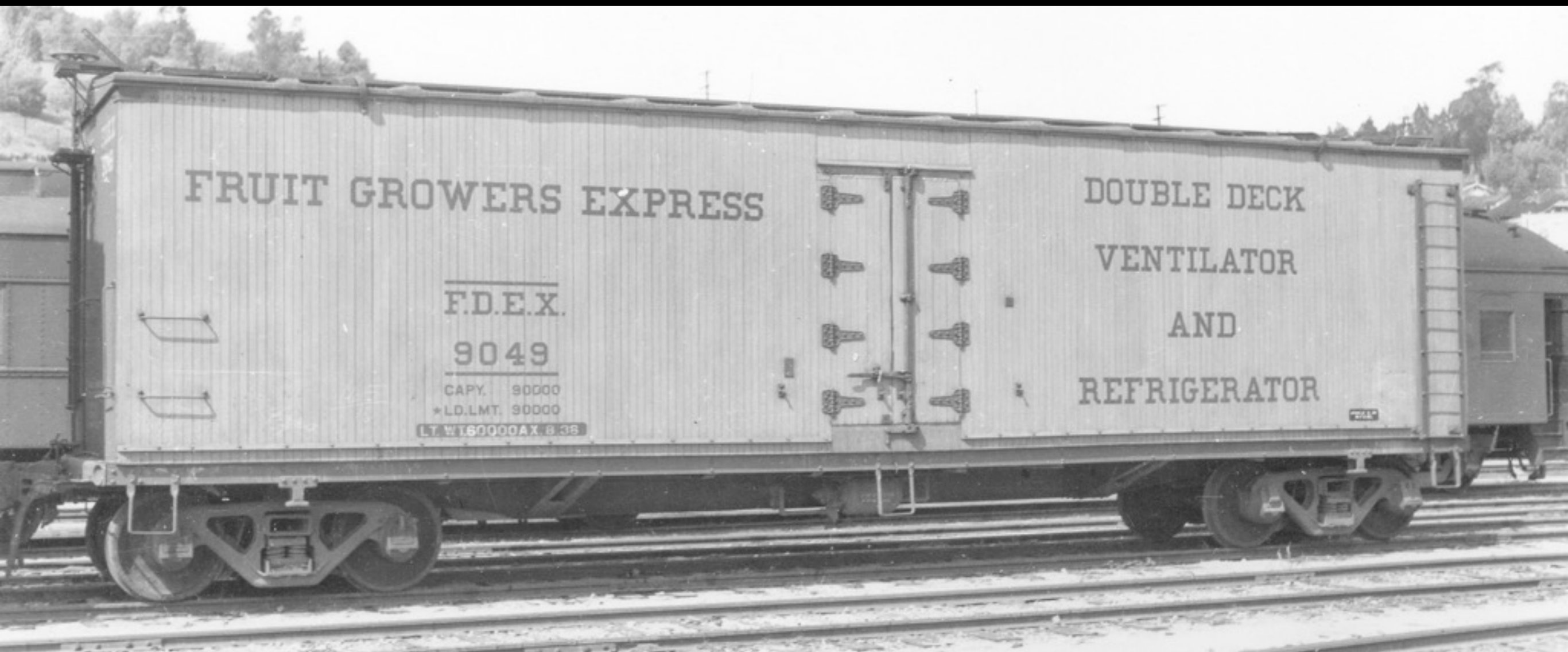


Fruit Growers Express Rebuilt Refrigerator Car

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



Fruit Growers Express/National Car R7 underframe
Refrigerator Car

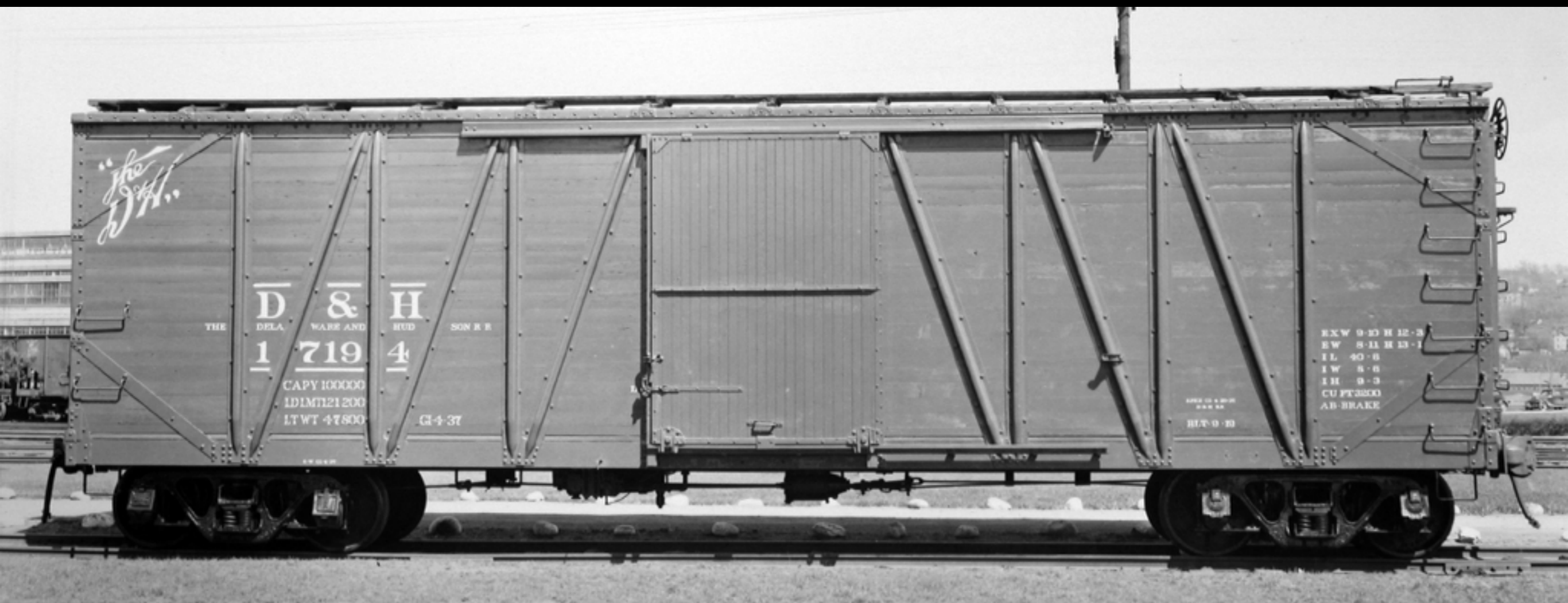


Fruit Growers Express/National Car R7 underframe
Refrigerator Car



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



Delaware & Hudson USRA 50-ton Box Car with Viking corrugated steel roof



Delaware & Hudson USRA 50-ton Box Car with Viking corrugated steel roof



Delaware & Hudson USRA 50-ton Box Car with Viking corrugated steel roof

- Westerfield USRA 50-ton box car
- Des Plaines Hobbies Viking roof



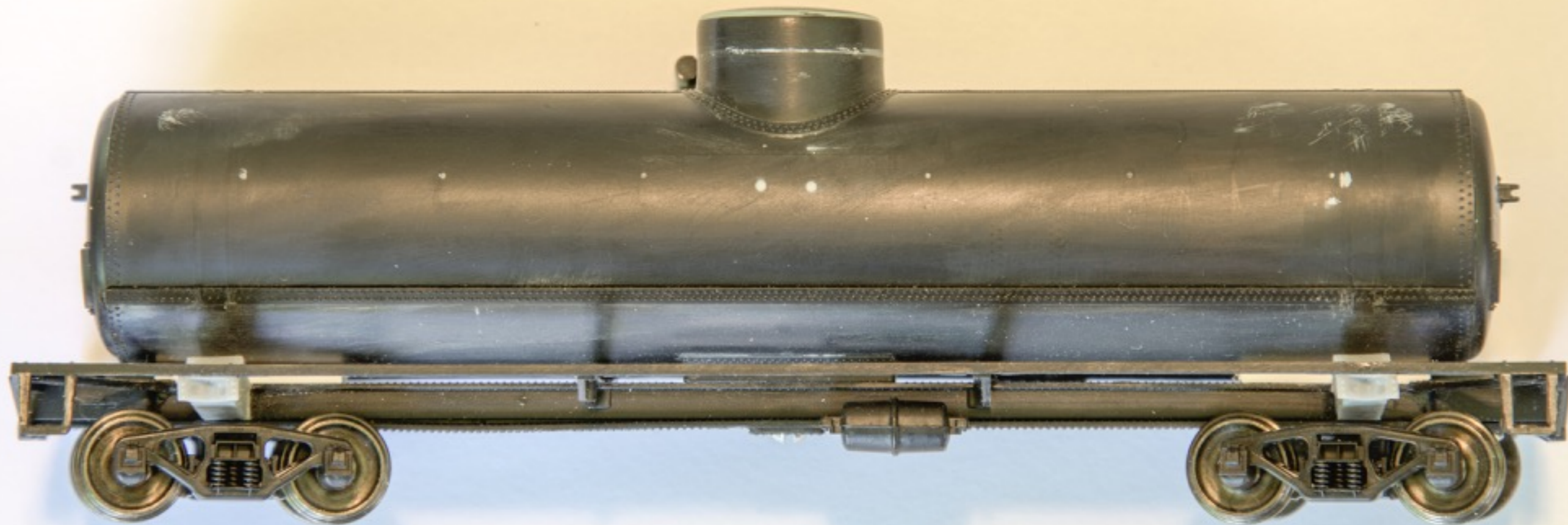
Southern Pacific O-50-13 and Union Pacific O-50-6
GATC Type 30 (Type 40) 12,500 gallon tank cars

- 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)

<p>SP 58609 CAPY 100000 LT.WT. 54400 NEW 4-42</p>	<p>SP 58627 CAPY 100000 LT.WT. 54200 NEW 5-42</p>	<p>SP 58742 CAPY 100000 LT.WT 54000 OAK 9-55</p>	<p>SP 62904 CAP'Y 110000 LT.WT 53800 HO 2-68 FOR LIQUID SUGAR LOADING ONLY</p>
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<p>SOUTHERN PACIFIC 58691 CAPY 100000 LT.WT 54000 ELP 5-50</p> <p>S P 58609 S P 58627 53100</p> <p>CAPACITY 12486 GAL'S CAPACITY 12493 GAL'S</p> <p>O-50-13 O-50-13</p> <p>A B BRAKE A B BRAKE</p>	<p>SOUTHERN PACIFIC 58722 CAPY 100000 LT.WT 54000 SAC 12-49</p> <p>S P 58742 S P 58691</p> <p>CAPACITY 12553 GAL'S</p> <p>O-50-13</p> <p>A B BRAKE</p>	<p>SOUTHERN PACIFIC 58722 CAPY 100000 LT.WT 54000 SAC 12-49</p> <p>S P 58742 S P 58691</p> <p>CAPACITY 12553 GAL'S</p> <p>O-50-13</p> <p>A B BRAKE</p>
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<p>SOUTHERN PACIFIC 627 628</p> <p>BOLSTER SNUBBER SPRINGS</p>	<p>SOUTHERN PACIFIC 627 628</p> <p>BOLSTER SNUBBER SPRINGS</p>	<p>SOUTHERN PACIFIC 627 628</p> <p>BOLSTER SNUBBER SPRINGS</p>
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<p>SOUTHERN PACIFIC 58742 CAPY 100000 LT.WT 54000 OAK 9-55</p> <p>S P 58742 S P 58691</p> <p>CAPACITY 12553 GAL'S</p> <p>O-50-13</p> <p>A B BRAKE</p>	<p>SOUTHERN PACIFIC 58722 CAPY 100000 LT.WT 54000 SAC 12-49</p> <p>S P 58742 S P 58691</p> <p>CAPACITY 12553 GAL'S</p> <p>O-50-13</p> <p>A B BRAKE</p>	<p>SOUTHERN PACIFIC 58722 CAPY 100000 LT.WT 54000 SAC 12-49</p> <p>S P 58742 S P 58691</p> <p>CAPACITY 12553 GAL'S</p> <p>O-50-13</p> <p>A B BRAKE</p>
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Southern Pacific O-50-13 and Union Pacific O-50-6
 GATC Type 30 (Type 40) 12,500 gallon tank cars

- Speedwitch D165



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)



Chicago and North Western riveted PS-1 Box Car

- Intermountain or Branchline car body
- Speedwitch or Intermountain PS-1 roof
- Kadee or Intermountain ends
- Kadee, Intermountain or good enuff underframe members
- Floor - scratch or model
- Doors -
 - Youngstown Intermountain or Branchline
 - Superior Intermountain or Speedwitch
- Tab sections below side sills - model or scratch



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



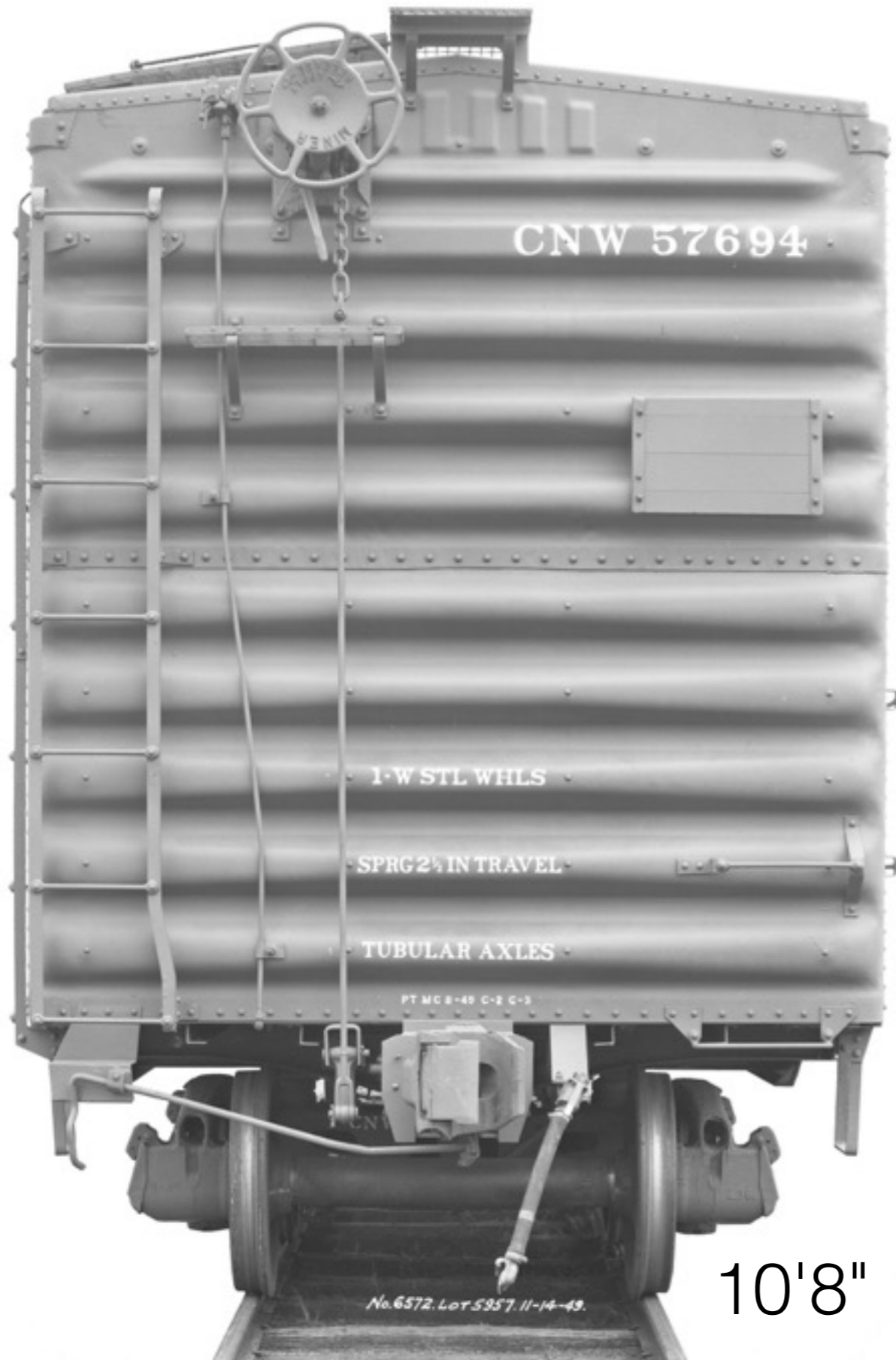
No. 6629 Lot 5951
10-21-49



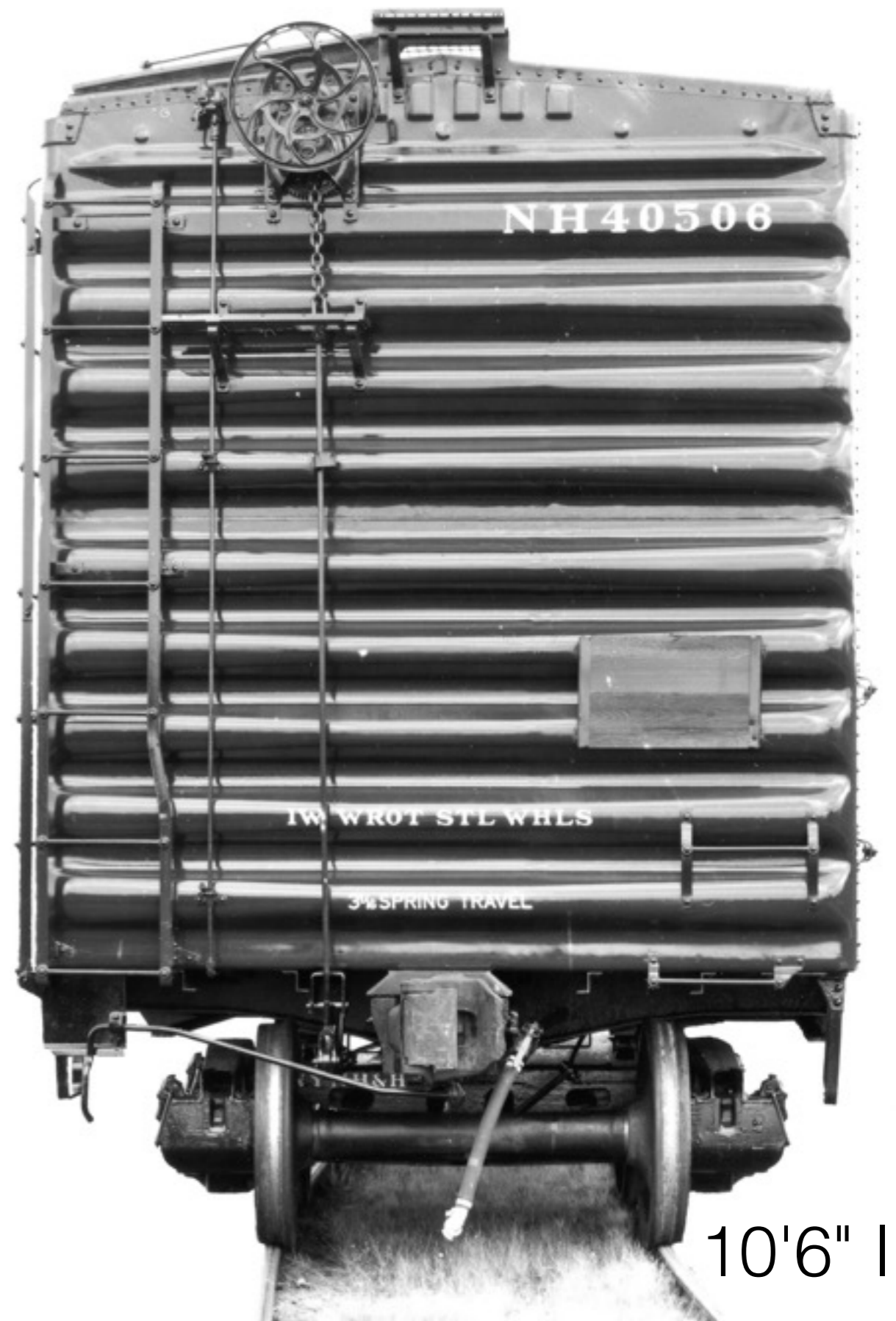
**Chicago and North Western
riveted PS-1 Auto Car**

No. 6565, Lot 5957.

10-21-49.

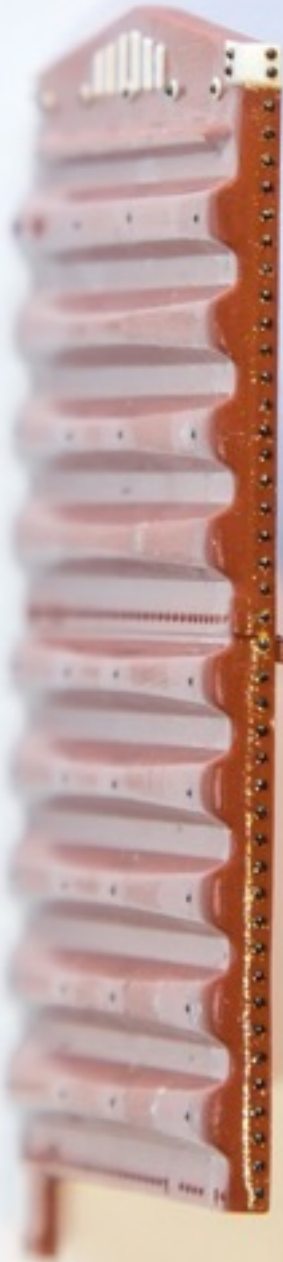
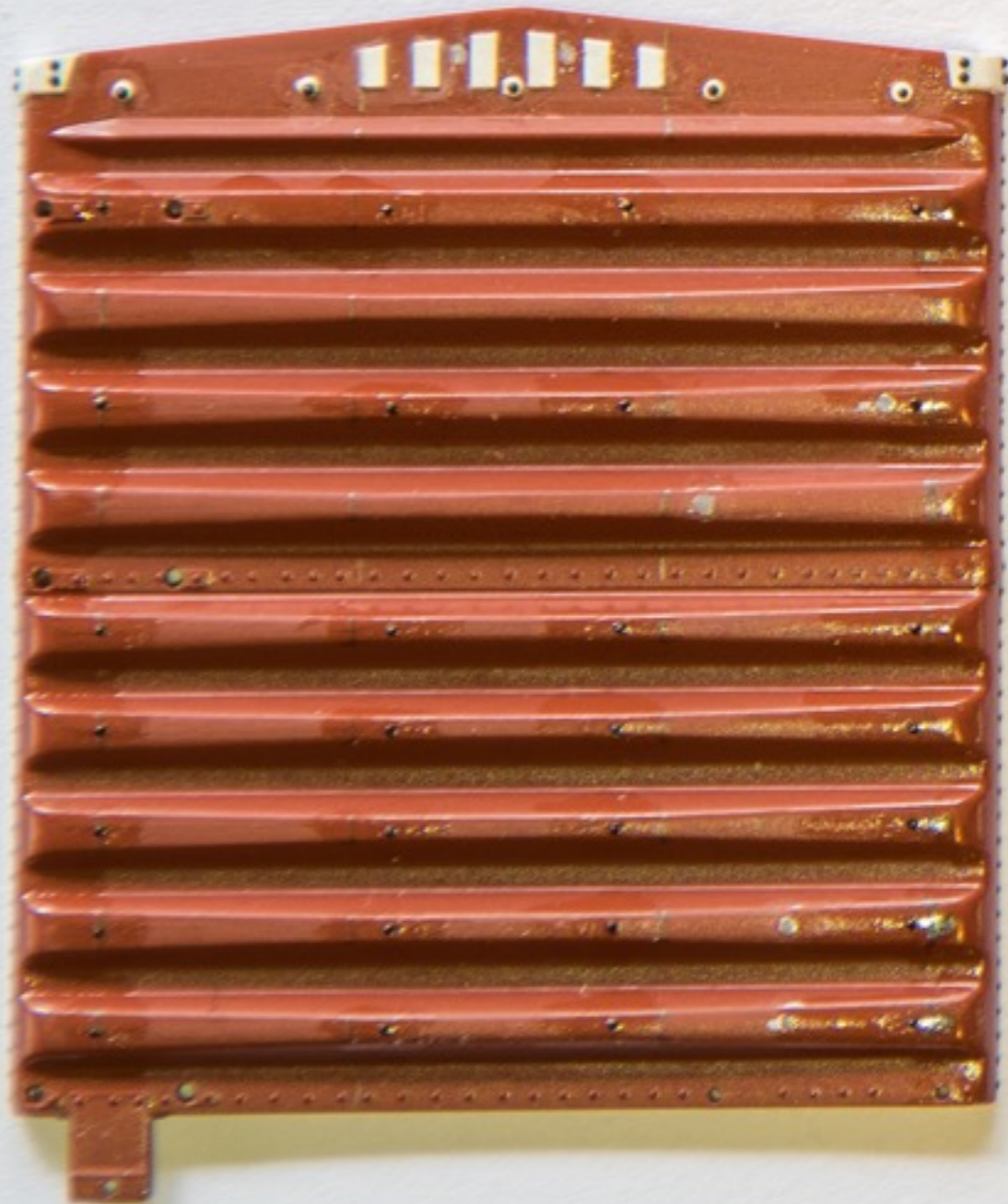


10'8" IH



10'6" IH

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

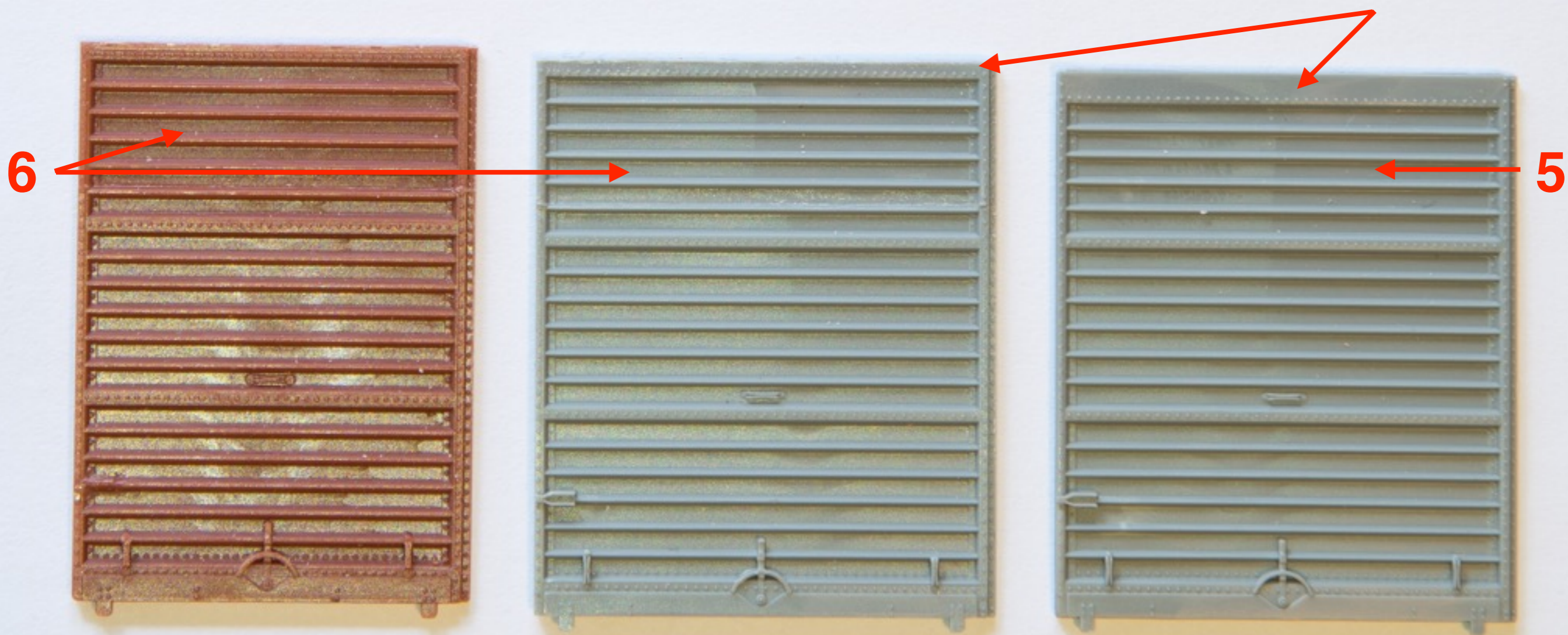


Chicago and North Western riveted PS-1 Auto Car

- 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

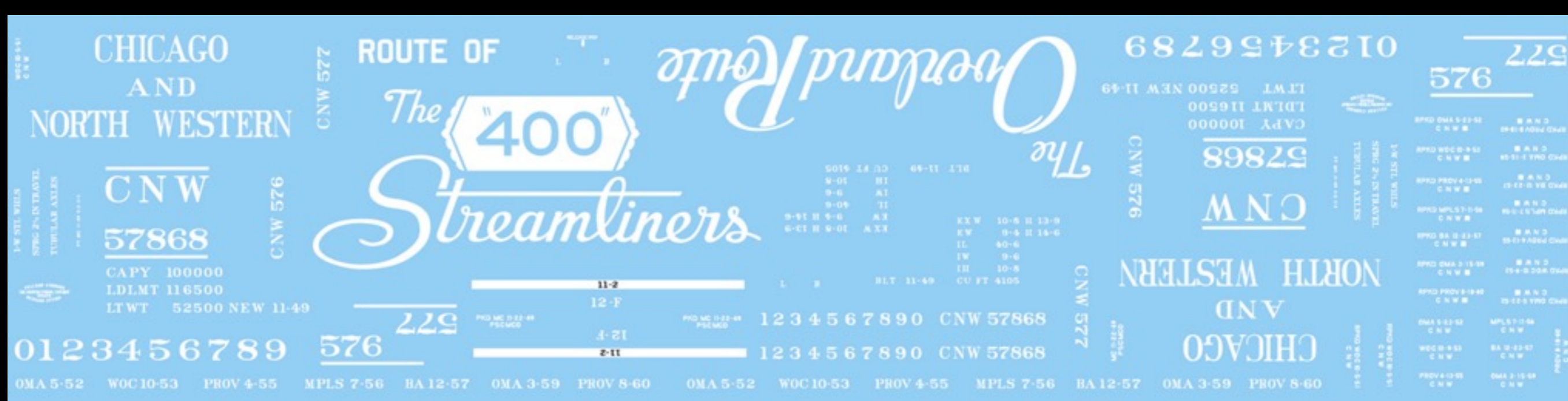


Chicago and North Western riveted PS-1 Auto Car
outer roof ribs removed per early PS-1 roof



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
- 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



Southern Pacific F-50-16 Flat Car



Southern Pacific F-50-16 Flat Car



Southern Pacific F-70-6 and -7 Flat Car

- F-50-16 was effectively a shortened F-70-6/-7



Southern Pacific F-50-16 Flat Car

- Red Caboose offered and the SPH&TS (<https://sphts.myshopify.com>) now offers the F-70-6/-7 kit
- To make an F-50-16, simply remove center portion of the car (creating a car with two crossbearers and two crossties between the crossbearers)... voila



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



Maine Central 1923 ARA (proposed) Box Car

- Red Caboose kit with Sunshine Models roof
- Modified doors, ladders, sill steps
- Concord Junction decals



Maine Central 1923 ARA (proposed) Box Car

- Re-roofed with Murphy solid steel panel and diagonal panel roofs
- Some cars had repaired doors
- Speedwitch parts set



Central New Jersey 1923 ARA (proposed) Box Car

- Hutchins Dry Lading roof
- Top-supported three-panel or Youngstown doors
- Dalman two-level trucks with Barber Lateral Motion devices



Central New Jersey 1923 ARA (proposed) Box Car

- Hutchins Dry Lading roof
- Top-supported three-panel or Youngstown doors
- Dalman two-level trucks with Barber Lateral Motion devices



Central New Jersey 1923 ARA (proposed) Box Car

- Red Caboose with Accurail Hutchins Dry Lading roof (hacked from a box car)
- Eastern Car Works Dalman trucks (use Tahoe now)
- Door rollers/hangers and guides from Grandt Line



Lehigh New England 1923 ARA (proposed) Box Car

- Re-roofed with Murphy solid steel diagonal panel roofs
- Apex Tri-Lok running boards
- Power hand brakes
- Lowered placard boards



Lehigh New England 1923 ARA (proposed) Box Car

- Re-roofed with Murphy solid steel diagonal panel roofs
- Plano Apex Tri-Lok running boards
- Power hand brake
- Speedwitch parts set



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>

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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

Finding Kitbashing Opportunities

This will be posted to prototopics.blogspot.com

Finding Kitbashing Opportunities

Thank you

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