

Modeling Minutia: X29/1923 ARA Modeling Notes with Details appropriate for October 1955

Overall modeling notes:

—Use 0.005 styrene at the bolsters on all models on the bottom of the sides to represent the bolster's flanges.

—Route Card Holders appear to extend slightly below the bottom edge of the side panels for cars using the sill location.

—The stringers between the bolsters and cross bearers are incomplete: Add lengths of .040 x .040 styrene to match the other portions.

—The only examples with the cross ties under the doors are the PRR X29, the DT&I copies probably, and B&O M-26B. The cross ties need to be moved under the door posts on **all** of the other models—move corresponding bolt/rivet heads under the door posts on both #7002 and #7003 body styles.

—Although the CNJ and LNE cars are ARA types they used the older X29 bolster spacing meaning the kit bolsters need to be moved six-inches out from the center of the car towards the ends of the car. The four large bolt/rivet heads that tied the bolsters to the sill also need to be moved to line up with the new bolster location.

—A variation to be aware of is the lower bracket grabs on the ends. On some prototypes—B&O M-26D for example—the brackets are rotated 90° while on others the brackets are perpendicular to the handhold. In the modeling notes I use the following notation.

Type 1 = the brackets are perpendicular to the handhold

Type 2 = the brackets are rotated 90° to the handhold (there is a parts sprue in the kit for this type)

X29 Types: use RC-7002 or 7005 patch panel kits w/1924 PRR body style w/no rivets on the end panels

Pennsy: Type "Y" trucks; Stem-winder brake wheel; two bracket grabs, Youngstown & 3-panel doors; variety of door stops (consult photos); 6-rung side ladders combined with drop grab below the ladder; variations w/the Retainer piping, door stops and top door track length (consult photos). Cross ties are paired under the door opening. Wood running board. Both bottom end grabs are Type 1 Bracket Grabs. **Modeling PRR 569356, 567103, 94794, 55794**

WLE/Nickel Plate: One thousand cars (25000–25999) built in January-February 1925; Tahoe #015 ARA 40-ton trucks; 3-panel doors; PRR style side mounted sill steps; 2nd grab is bracket; Vertical Brake (stem-winder brake wheel); #7005 PRR patch panel body can be used; close mounted paired door stops; 6-rung side ladders combined with drop grab below the ladder. Placard Board mounted in the lower left corner of top door panel; Route Card Holder mounted along the side sill. Retainer pipe bends to the right below the top end panel. Both bottom end grabs are Type 1 Bracket Grabs. Short upper door-track. Wood running board. Note: by my period the door hardware was mounted on a distinctive trapezoid shaped gusset plate. Eric Hansmann argues convincingly that based on Bolts/Rivets along the sill in the door area these cars had the cross ties located under the Door Posts, not under the doors as on the X29. This group used a three-lever system different from PRR. When the WLE converted these cars to the “AB” Brake system they retained the “K” disconnected Air Reservoir and added an “AB brake Emergency Reservoir” on some of their cars (this resembles one-half of a conventional reservoir). **Modeling WLE 25038 and NKP 25986.** (*Tangent* brake wheel for WLE and NKP.)

B&O M-26B: One thousand cars built in 1926 by *Baltimore Steel Car* 267000–267999; 7-rung ladders, bottom rung is a drop grab; two Bracket Grabs on the sides; PRR style side mounted sill steps; Ajax geared handbrake; Andrews & cast side-frame trucks (Buckeye Tahoe #006?); paired door stops varied between wide & close mounted. Short upper door track. (32’3” Truck Centers, 5’ Truck Center to Striker; Cross Ties same location as X29—under the door opening. Both bottom end grabs are Type 2 Bracket Grabs. (Running Board length 42” 9”)

1923 ARA Types use RC-7003 kits w/rivets on the end panels: Note variations in truck spacing. Cross ties need to be moved to under the doorposts in all cases for non-Duryea cars.

Maine Central: Built in July 1929 by *Standard Steel Car* (1004 cars, 5000–6003); Tahoe #007 Double Truss AAR trucks; Youngstown doors; Route Card Holder mounted on the door; 7-rung ladders (bottom rung is a drop grab), bolted strap attachment; 5’6” Truck Center to Striker; side mounted sill steps (rectangular shape); Ajax handbrake; door stops aligned with top and bottom door-tracks. Both bottom end grabs are Type 2 Bracket Grabs. Note: by the Green and Yellow paint scheme (1953) era, lower part of the doors **sometimes** repaired with flat steel panel (consult photos). Variation in the placement of Dimensional Data stenciling on green & yellow scheme. Variation in patch panel repairs. **Modeling 5064, 5145, or 5183 w/Murphy Paneled Roof replacement**

Lehigh New England: PRR Type “Y” or Tahoe Barber #013 S-2 50-ton trucks?; Youngstown doors; 6-rung side ladders combined with drop grab below the ladder, bolted strap attachment; PRR style side mounted sill steps; door stops aligned with top and bottom door tracks. Full-length upper door track. Many if not most photos indicate that a second left end side grab iron was not always in place well into the 1950’s. When it was in place it was a conventional grab iron, not a bracket grab. Both bottom end grabs are Type 1 Bracket Grabs. Cars #8009 and #8292 have a reinforcement tab under the door area.

8001–8200 Built 1927 5’ Truck Center to Striker; X29 type ladder attachment; PRR Type “Y” trucks; Three Lever Brake arrangement similar to WLE/NKP; Diagonal Panel roof rebuilds; Ajax Handbrake

8201–8500 Built 1931 5’ Truck Center to Striker; X29 type ladder attachment, slightly different ladder stile; Ajax handbrake

8501–8750 Built 1934 Dreadnaught ends

Modeling example w/Diagonal Paneled Roof replacement

Central New Jersey: Blt. 10-1926 to 1-1927; Tahoe #002 Dalman Two-Level trucks w/Barber Lateral motion detail; bottom mounted sill steps; 3-panel, Youngstown and five-rib six-panel Superior doors; 6-rung side ladders combined with drop grab below the ladder, bolted strap attachment; conventional 2nd grab iron on left end instead of a bracket grab. End grabs: Type 1 Bracket Grab under the ladder, more conventional grab on the right side with some sort of attachment flange. (Note: CNJ 21021 has a long sill reinforcement retrofitted between bolsters while on 21240 the reinforcement extends almost to the truck journals [consult photos].) Unique upper door track or hanger. Ajax Handbrake; 5’ Truck Center to Striker; large triangular gussets applied to each side of the door opening (shape varied). Variations of Patch Panel repairs. ***Modeling CNJ 21240 w/Superior doors and Hutchins Roof replacement***

Chicago Great Western: There were three groups of 500 cars each built in 1930–31 and 1933 by *Pullman Standard’s* Michigan City, Indiana plant with unique “Reversed” 3-panel doors, a slightly different side panel and riveting construction which were three inches narrower than the other cars of similar construction. All were built with power handbrakes and conventional grabs irons on the left end of each side and the ends in contrast to the Bracket grab style used on many of the other cars. These cars had wood running boards and six-rung side ladders with a drop grab iron below them. Full length upper and lower door tracks, door stop on lower door track. Neither kit #7002 or 7003 has correct rivet arrangement but I am going to use #7003 as it is pretty close.

CGW used even numbers

85000–85998 Dalman Two-Level trucks; single left end grab iron

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87000–87998 Coil Elliptical trucks, two left end side grab irons

Based on photographs the 85000 and 86000 series may not have received the second grab iron on the left end of the side.

Baltimore & Ohio M-26, M26A, M26C, M26D, M26E

Note: there is variation with a least five door types, lower door support, and with the length of upper door tracks, use photos w/all classes

Common to each class: 7-rung side ladders, bottom rung is sometimes a drop grab; two bracket grabs; body mounted Route Card Holder (unique B&O Tatum Pat. style) to the left of the door; stamped Plate Steel Tatum Pat. Brake Step. Not yet able to say definitively on all classes if both bottom end grabs are Type 2 Bracket Grabs. I have noted where I can, document with photos.

M-26 Blt. 1926; 2000 cars; PRR style side mounted sill steps; Andrews or cast side-frame trucks (Buckeye Tahoe #006?) (consult photos); Stem-winder Tichy 5-spoke brake wheel; single and wide & close mounted paired door stops; (32'6" Truck Centers; 5' Truck Center to Striker, 42'6" over striking plates, Running Board length 43'0"). As on the WLE cars this group used a three-lever brake arrangement different from that used by the PRR.

M-26A Blt. 1926–27; 2500 cars; PRR style side mounted sill steps; Cast side-frame trucks (Buckeye Tahoe #006?); Stem-winder Tichy 5-spoke brake wheel; 3-panel or Youngstown doors (consult photos); Claw type door supports with 3-panel door, conventional door track w/Youngstown door; Wide or close mounted paired door stops (consult photos); (32'3" Truck Centers, 5' Truck Center to Striker, Running Board length 42' 9"). Both bottom end grabs are Type 2 Bracket Grabs.

M-26C Blt. 1928; 1000 cars—true A.R.A. Type; rectangular side-mounted sill steps; Andrews or cast side-frame trucks (consult photos); Stem-winder brake wheel; Wide mounted paired door stops; 5' 6" Truck Center to Striker, Running Board length 42' 9"; built by BC&F

M-26D Blt. 1928–30; 5500 cars; rectangular side-mounted sill steps; Andrews or cast side-frame trucks (consult photos); Youngstown or 3-panel doors (consult photos); Ajax powered handbrake; Wide mounted paired door stops; Variation in lower door support hardware; (31'3" Truck Centers 5' 10 3/4" Truck Center to Striker, Duryea UF 43'0 1/2" over striker

plates, Running Board length 42'10") Model B&O 277557 w/Tatum Pat. Door & Andrews trucks; built by BC&F

M-26E Blt. 1931; 1000 cars; rectangular side-mounted sill steps; Andrews trucks; Youngstown doors; Wide mounted paired door stops; Ajax powered handbrake; 31'3" Truck Centers 5' 10 ³/₄" Truck Center to Striker, Duryea UF; built by BC&F

Note: Kit Running Board is 42' 6"

Acknowledgements

John King provided information on the B&O Running Board lengths and Eric Hansmann provided the information about the WLE/NKP Cross Tie location. Ted Culotta's many writings provided data for the many detail variations.

This is a **work-in-progress** meant to guide my particular modeling interest and will be revised as necessary. I am sharing it to help anyone interested. Just be aware that it is geared to my October 1955 modeling date. Comments, additions and corrections are welcomed.

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Model on Ya'll!

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