L&N Ventilated Boxcar 2024 Shake 'N Take **Cocoa Beach RPM**

Fenton Wells

Central of Georgia team tracks, Atlanta GA circa 1940, Photo courtesy of C of G HS

L&N Ventilated Boxcar 2024 Shake 'N Take

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FOREWORD: by L&N Historical Society Modeling Committee

This kit represents an important offering to steam era modelers, not just those devoted to the L&N. While it provides challenges to modeling skills, it also gives modelers flexibility to expand the level of detail beyond what's provided in the kit in order to suit their modeling tastes and skill levels. Those opportunities will be flagged throughout the text, signified by (***) so that modelers can make those choices.

The L&NHS Modeling Committee deeply thanks Fenton Wells for tackling this project and allowing changes to his original presentation to the 2024 Cocoa Beach "Shake 'N Take" group. Without his work on this project, L&NHS would not be able to offer this welcome addition to the L&NHS stable of L&N prototype models.

Thanks for your purchase and enjoy!

Additional materials & optional parts

It is assumed most modelers will already have extra styrene strips, detail parts, tools, and other modeling necessities needed to complete or enhance certain steps or suggested options of this kit.

Styrene strips: .005, .010x.030, .010x.040, .015x.080, .060x.080, .040 sheet.

Car weights: ³/₄" hex nuts or equivalent lead weights to suit; note, the heavier the car, the better it tracks.

Archer rivets or equivalent rivet decals.

Wire: .010", .019" brass or equivalent.

Six-rung ladders; Kadee or equivalent.

Carmer style cut levers: Yarmouth or equivalent.

Trucks: Optional upgrade to Kadee or Tahoe.

Optional Scrap piece of styrene HO grooved siding.

This is the prototype, the car we are modeling

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L&N No. 98241, at Fayetteville NC, October 4th, 1951, Courtesy of Bob's photos

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L&N's Ventilated Box Car Series 98100-98599 By R.R. South

Argricultural business on the L&N expanded greatly with the advent of the use of internal combustion engines in the farming of territories along the L&N's system. To meet the demand of shipping larger quantities of non-perishable farm products, the L&N began as early as 1887 to use ventilated box cars to move the produce to market. All through the early 1900s the L&N bought more and more ventilated box cars. In 1910, these cars were assigned with the American Railway Association "VA" classification. This classification states: VA" -Vegetable Ventilator. A car equipped with insulation, but having common box car end and side doors which afford no protection against heat or cold." The ventilation aspect was provided by means of openings between slats in the side doors and by ventilation hatches on the sides and ends of the cars. In 1923, the L&N ordered the last wooden "VA's" they would receive when 500 ventilated box cars were bought from the Tennessee Coal, Iron & Railroad Co.

The ventilated box cars were built at TCI's large facility in Fairfield, Ala., on the outskirts of Birmingham. Painted freight car red, the cars numbered 98100-98599 served the L&N's customers carrying potatoes and other vegetables until the last ones were retired by January, 1957. Additional data on these cars is provided for in the accompanying diagram.

Curiously enough, one car almost an exact duplicate except for the style of roof, was built by the Mt. Vernon Car Co. The car was numbered 97100. But why only one? The L&N had been a steady customer of that company for years and had purchased ventilated box cars from them in the past. Perhaps we will never know.

L&N No. 98541 was photographed in April, 1940 headed for the potato fields of south Alabama. (H.H. Pollitt/L&NHS col.)



Article from L&NHS courtesy of L&NHS Modeling Committee

A brief history of the L&N's 501, steel underframe, ventilated boxcars, built in 1923 by the Tennessee Coal, Iron & Railroad Co. and one car by Mt. Vernon Car Co.



L&N Ventilated boxcar diagram courtesy of the L&N Historical Society

Ventilated Boxcar traffic declines in the early 1950's and the L&N cars were retired by 1957

ORER Information for L&N Ventilated Boxcars								
1944		1952		1953				
Qty	Numbers	Qty	Numbers	Qty	Numbers			
1987	7203-7254	0		0				
4 7 7	45000 47000	0		0				
1//	15000-17999	0		0				
			97100-		97100-			
1808	97100-99099	69	99099	37	99099			
3972		69		37				

Y'ALL Roads Ventilated Boxcars (VA) in 1953 ORER								
ACL	2367	C&O	0					
SAL	2287	N&W	0					
SRR	21	NS	0					
l&N	37	S&A	0					
C of G	1452							



Photo courtesy of the L&N Historical Society



Photo courtesy of Steve Hile



Photo courtesy of the L&N Historical Society



Photo courtesy of Arn's Photos (Arnold Menke)

L&N #98241 – The 2024 Shake 'N Take Model



Starting points: Many thanks to Accurail, Chad Boas, National Scale Car, Kadee and Tichy and the L&N HS



I started with the underbody:





(***)Instead of hex nuts, apply stick-on lead weights



GENERAL



Then added the brake equipment and piping



Starting on the car sides – I carefully cut off the cast on ladders and grabs and then sanded and scribed new siding lines with a dental tool. Then cut off the ends, added .040 styrene false ends for gluing the new resin ends onto the car. Note-wood block a 'la Greg Martin, it saves fingers while cutting and filing.

Car Side details



Starting on the car sides:

1. Add the .040 by .040 at each roof eve

2. Add the .005 Styrene corner braces and straps and Archer rivets

Mark the floor location approx., 9" from the bottom of the car side at the bottom of the door opening. This sets the bottom of the side vent
Mark the open-door positions on the car side. This allows you to position the door stops and attach

5. Glue the side vents on and drill for the 'U' bolts to attach the slide mechanism to the car sides. I used flattened .010 wire and bent it. The slide bar is a .019 brass wire. Cut long and then cut flush after gluing in place. See photos on next slide. Add a piece of .010 by .040 styrene at the top of each side vent. Trim off the excess styrene pieces for the vent slide bar holding straps

6. Add the top door track with evergreen styrene

7. Add the sheet metal tie piece(Evergreen .010 by .030) along the bottom of the car side and add Archer rivets

Side Vent - Modelers note



Notice the protrusions on the vent on the left (black line). They need to be removed if the modeler wants to replicate the vent moving mechanism. Shown in the previous slide. This is because I'm a novice master pattern maker. My bad. So, remove the protrusions to look more like the vent on the right so that the holes can be drilled for the wire and the clamps and slider for the vents. Or if you are an expert driller drill out the resin clamps and insert the .019 brass wire as slider. Also note I added a .010 by .030 styrene strip across the top of the vent



More side vent notes

Note 1 - also added a piece of flattened .010 brass at the top of the vent to simulate the latch handle, assuming that is what it is.



Starting on the car body: The side vents

 Glue side vent to car body
Flatten .010 brass wire to make clamps
Bend in tight U shape.
Drill holes for clamps

5. Insert .019 wire into clamps to replicate slide mechanism and glue clamps over slider and into car sides6. Trim slide wire to fit.



Body side details- continued

Building the side doors: to match the prototype I added .010

styrene across the top 3 cross braces of the vent doors and the top of each solid door. Then added Archer rivets. Not shown here I replaced the cast door handles with wire





Doors - the bars, many bars of .010 brass wire

- I used .010 styrene to build up the back of the vent doors to make room for the brass wire.
- I precut the wire. Then I started in the middle of the door and glued the first wire, let it dry and eyeballed out to each side with brass wires.
- Using the teabag material, I added the wire netting behind the wires.
- (***) See the following page for another method of adding & spacing the door bars.

(***) Alternate Door Bar Construction

Step 1: Pre-cut brass door bars and lay out on scribed siding for equal, parallel spacing.

Step 2: Use masking tape to transfer completed bar set to backside of vent door.

Step 3: Glue door bars to vent door and cover top & bottom edges with styrene strip.









I also added the door guides along the door bottoms and cut wire to fit to simulate the prototype. Details from and old boxcar door were added to the door tops to attach to the top door guides



Side sill steps – these had a few bends, and I used Details Associates brass bar(.010 by .030) and bent them. Added (.060 by .080) Evergreen to underbody to drill holes for sill steps. Note: to simulate the side sill channel I used a Styrene strip .040 by .125 Also note I added a bent wire loops to hold train line and air hoses. The plastic pieces that simulate the bolster extensions over the side sills are .020 by .156 styrene strip and I added 2 Archer O scale rivets to the side sill s can be seen on the next slide.



The car has been primed with Scalecoat II Grey Primer

Finish the car sides-add grabs with NBW castings and ladders. I added 2, O scale Archer rivets to the side sills at the bolster ends. Priming shows things that need to be fixed.

Detailing the car ends



Add ladders, NBW castings, grabs and brake step support from .005 brass shim. Add louver detail. .015 plastic strip to fit.



Add chain detail to brake rod and secure to underframe



Add brake staff and brake step

Finished car ends

• Finished car end - tack boards, brake wheel added and Carmer cut lever added



Roof -



I filled in the holes in the roof with scrap plastic and body putty

> Roof walk and laterals made from Styrene .15 by .080 with end supports and wire corner grabs



Finished roof

Finished car – painted with Tru Color L&N Freight Car Brown, TCP #186 and National Scale Car Decals:

(***) Tichy Bettendorf trucks shown; optional Kadee or Tahoe 50ton Bettendorf





Finished car, painted weathered and ready to roll; optional interior bracing typical of that for watermelons, etc.

Many thanks are due: David Orr and the L&N Historical Society

Robert Kirkman Rusty Evans Lee Singletary L&N RR HS Electronic Newsletter Accurail Boxcar kits - Dennis Storzek, Eric Cote and Accurail Decals - National Scale Car Co. - Ryan Mendell Resin castings - Chad Boas Couplers - Kadee Brake castings and grab irons - Tichy Train Group Arn's Photos Bob's Photos David Bott

And.....Especially to... The Shake 'n Take group:

Schuyler Larrabee Bruce Smith Steve Hile Brent Greer John Berry

Thank You, Thank You, Thank You!!!

EPILOG: Additional variations of the ventilated boxcar kit

An additional version modeled with open vents by Fenton Wells:



EPILOG: continued.....

Two versions coupled together by Fenton Wells:



EPILOG: continued.....

A version with options by Lee Singletary before painting, B end.

EPILOG: continued....

A version with options by Lee Singletary, after painting and decaling:

