

[N-Circle Railroad Update 17 – November 14, 2023](#)

It has been almost a year since my previous N-Circle Update, as I was occupied this summer with many things, including going through 30+ years of issues of Model Railroader magazines. It was an interesting journey down memory lane of the history of the evolution of model railroading! If nothing else, it reinforced the understanding that there is very little that I will discuss in these updates that hasn't already been done by someone else, better...but...

This Update will focus again on building and detailing vehicle kits from various manufacturers. The details of the kits will be primarily of interest to those who may build these specific N-scale kits, and many of the techniques used are the same as previous N-Circle Updates. However, some of the thoughts here are applicable to work in other modeling scales.

Reconstruction of Completed Vehicle Kit Damaged in Shipping

But first, an opening aside, a story on how NOT to ship delicate equipment through the U.S. Mail, and recovering when someone does...

I purchased a completed tow truck model on eBay, custom painted and ready to go. The seller packaged it by carefully drilling two holes in a clear plastic box to strap it with a twist-tie to a strip of solid foam glued to the bottom of the box. Unfortunately, it appears that early in its travels, the package experienced a sharp shock and the glue bond between the cab and the body of the truck broke, freeing both to bang around the inside of the case the remainder of the trip, breaking off wheels, the boom, and other parts, and crushing the side mirrors. The aftermath can be seen here.

[N-Circle_23-06-27_RoyaleModels_TowTruck_Before-1](#)



However, it was an interesting one-of-a-kind model, kit-bashed from multiple kits, so I decided to keep and re-construct it. The seller gave me a partial refund for the damage.

After multiple rounds of super-gluing and touch-up paint and adding my own Shell decals and green Vermont license plates for use in the N-Circle's service station, the reconstruction came out pretty well, as seen in following two photos.

[N-Circle_23-07-12_RoyaleModels_TowTruck_After-1](#)



[N-Circle_23-07-12_RoyaleModels_TowTruck_After-2](#)



So, all's well that ends well! In the process, I discovered a new manufacturer of N-scale vehicles, Royale Models, which I will explore further!

Plastic Resin Vehicles Kits

But to get to the main topic of this update, I will discuss another round of mass-producing plastic resin vehicles kits, extending from Update 16 from a year ago. The first group is ten Cars N Scale kits, which were predecessors to Bruce Richardson and Fine N Scale kits. These are vehicles from the 1940s and 1950s. They are simple kits, just paint the solid resin bodies and glue on the wheels. The second group is ten Hagen N Scale kits, which appear to be a new producer of cars and trucks from the 1950s through 1970s.

The first step was to label the undersides of the bodies to identify them during construction and because I like to be able to identify the year and make of vehicles in my collection later. For this I used an Ultra Fine-point black Sharpie pen which will write permanently on almost any material.

After opening each package, I organized the parts in an electronics parts storage box from college, placing the package label in the compartment with each vehicle's parts, to keep the correct wheels together with the bodies. The box for the CNS vehicles is shown here, an identical box was used to organize the HNS vehicles.

[N-Circle_23-09-29_CNS_Vehicles](#)



Cars N Scale Kits

These Cars N Scale kits appear to be earliest versions of the molds later used by Bruce Richardson Cars, then Fine N-Scale. They use the earliest brown resin material, which was fairly smooth on most surfaces, though with quite a bit of mold flash on the bodies.

The Hagen N Scale kits appear to be produced by a new company with new molds that I found on eBay this summer, I had not seen their products previously. They use a newer, higher quality white resin and they include extra wheels in every set – a project-saver if you lose one of these tiny wheels on the floor or damage one while trimming it! They include two sets of five wheels with each car, with two different hub patterns. The hub option is nice for close-up examination, but is not going to be visible to most folks when the vehicle is on the layout. But all of the extra wheels provide a nice supply of spare parts for future projects!

CNS uses the same wheel mold for all their autos, so it turns out that it wasn't so important to organize all of the kit parts separately, as the wheels are the only parts to add to the bodies. But with HNS including two sets of five wheels with each of their car or pickup truck kits, across the six kits there were three different designs of different spoke patterns. I did not get the sense that the wheel types were carefully matched to the car model, so I ended up painting them all together, then just choosing a wheel type to use on each car. This makes it a lot easier to build kits in mass production.

An important first step is to wash the parts to remove any oils from the molding process and handling before painting. I used a new tea strainer ball purchased on Amazon to hold the parts, shown here.

[N-Circle_23-09-29_WashingContainer](#)



I first put the vehicles bodies in the ball and immersed it in the sink with hot, soapy water with Dawn dish washing detergent. After they soaked for a while, I removed the parts one-by-one and rubbed them with my fingers to work off any remaining residue, before returning them to the ball for a final rinse.

I used a similar process for the wheels, except I did not remove them and rub them – they are way too small to risk losing them! Instead, I just soaked them in soapy water for a while, then ran clean water through the sides of the strainer to rinse – close enough! This is where the strainer was most valuable, to not lose these tiny wheels during washing.

All of the CNS and HNS vehicles are shown here, after applying a coat of Vallejo grey primer.

[N-Circle_23-10-01_CNSandHNS_Vehicles](#)



I left the wheels on their sprues initially and painted the fronts and treads black – they are much easier to handle this way. After they are dry, cut them from the sprue and trim the edges, then apply a second coat of touch-up black paint to repair any nicks from the handling.

To paint the chrome hub caps, I used the stamp stick method discussed in Update 15 from October 31, 2022.

I used a double-ended sharp wooden toothpick to paint the details on all of the vehicles discussed in this update – for some details using the point of a metal sewing pin. Even the micro-brushes shown in Update 15 are not fine enough. I use one end of the toothpick to apply paint and the other end to quickly scrape off over-runs if the paint blossoms, before it dries.

After painting the CNS vehicles, I added “Fresh Eggs” decals to a brown 1940 Ford Panel truck and US Postal decals to a blue 1950 Chevrolet Delivery Sedan to create some interest. The decals were from Dave’s Art sets.

[N-Circle_23-10-22_CNS_Vehicles-3](#)



[Hagen N Scale Kits](#)

The HNS kits were very similar to the CNS kits, except for one challenge: on the HNS dually trucks, the chassis center rail under the bed is too narrow, so the rear wheels would be too far recessed. Therefore, I had to add a styrene spacer between the chassis rail and the back of the wheels. A small piece of white, thin styrene worked fine as shown here. I touched up the spacers with black paint after the kits were completed.

[N-Circle_23-10-17_HNS_Vehicles](#)



The four completed HNS dually flatbed trucks are shown here, in addition to the CNS van truck on the left:

[N-Circle_23-10-22_CNSandHNS_Vehicles-1](#)



The CNS van is clearly over-sized, even though it was labelled as N-scale, so it probably won't spend much time on the layout, unless it can be placed apart from other vehicles where the scale difference will not be as noticeable.

I attempted adding a splotch of "blue sky reflection" on the windows of these vehicles, which did not work out really well, but was going to be too difficult to remove after the fact. Another lesson learned, not to be repeated.

The six completed HNS cars and pickup trucks are shown here. The green and white sedan and white Ford Explorer were resin bodies I had from a collection of parts purchased a few years ago which I added HNS wheels to and finished.

[N-Circle_23-10-22_HNSandMixed_Vehicles-1](#)



As with the wheels discussed in Update 15, many of the HNS wheels had too much mold fill, increasing their thickness, making them protrude from the wheel wells. I don't have a solution for this – it may be possible to file down the back of the wheels, but given their tiny size and thus the challenge of holding them while filing, I did not attempt it.

Johnny Lightning Metal Kits

With all of the paints and tools out, I moved on to paint four Johnny Lightning vehicles. These are solid metal cast models, with no parts to attach. The metal is very smooth and shiny, so it is important to apply a good primer paint first. The light blue Chevrolet pickup truck was a Showcase Minatures metal kit which I purchased completed but needed touchups.

[N-Circle_23-10-14_Mixed_Vehicles-3](#)



Note again the discrepancy in size among models that are sold as “N-scale”: the light blue pickup truck is oversized, while the orange Dodge Daytona is undersized. This will require being careful with placement of these vehicles on a layout.

3-D Printed Plastic Kits

Next, I tackled three 3-D printed vehicles purchased recently. While these did not have as much flash to clean up as did the grain trucks in Update 13 from September 2022, the plastic ridges on the surfaces do not cover well with paint. Though a couple of coats of paint will smooth them over – they are not too visible in the magnification of these photos.

[N-Circle_23-10-14_Mixed_Vehicles-9](#)



These models are a bit rough: "Okay from ten feet," but can be used mixed in with other vehicles. However, add the colorful Dodge Daytona to the ramp truck, and it becomes a more interesting scene. In a final implementation, I would add some wheel blocks and chains to realistically show the car secured to the truck.

[N-Circle_23-10-14_Mixed_Vehicles-8](#)



Magnuson Models Truck Kits

Finally, I decided to do another set of eight vehicles while it was still warm enough to work in the garage and all the painting supplies were set up. Having completed the inventory of 1950s vehicles, I broke out some interesting kits in the cabinet for 1980s operations. Four refrigerated van trucks will be generally useful at the grocery transfer warehouse and at the stores.

These Magnuson Models refrigerator trucks were purchased in the mid-1990s and had a very slippery surface on their resin bodies, I had to handle them carefully to not rub off the primer paint while applying the finishing paints. I made Piggly Wiggly grocery store decals using a logo graphic downloaded from the web and using the process described in Update 16 from December 26, 2022 and applied them to two of the trucks. Piggly Wiggly is a grocery store chain in the south, I purchased a pre-built store model a couple of years ago for Louisiana operations on the N-Circle Railroad.

Gluing the wheels on these Magnuson Models trucks was a bit tricky. The front wheels were easy, as the truck can be laid on its side, and the wheels simply aligned in the flat wheel well. But the rear wheels are glued to a small diameter axle peg, which the wheel will not stay balanced on with the truck on its side. The kit's instructions recommend using a piece of modelling clay under the chassis to raise it to the desired height to place the wheels under the truck. Not having any clay handy, I built up a platform out of strips of thin box board, until I got the desired height, as shown in the following photo. The trick is to raise the chassis sufficiently, so the wheel is not resting against the underside of the body. On a real truck, there would be space between the top of the tires and the body to allow play in the suspension. But without the

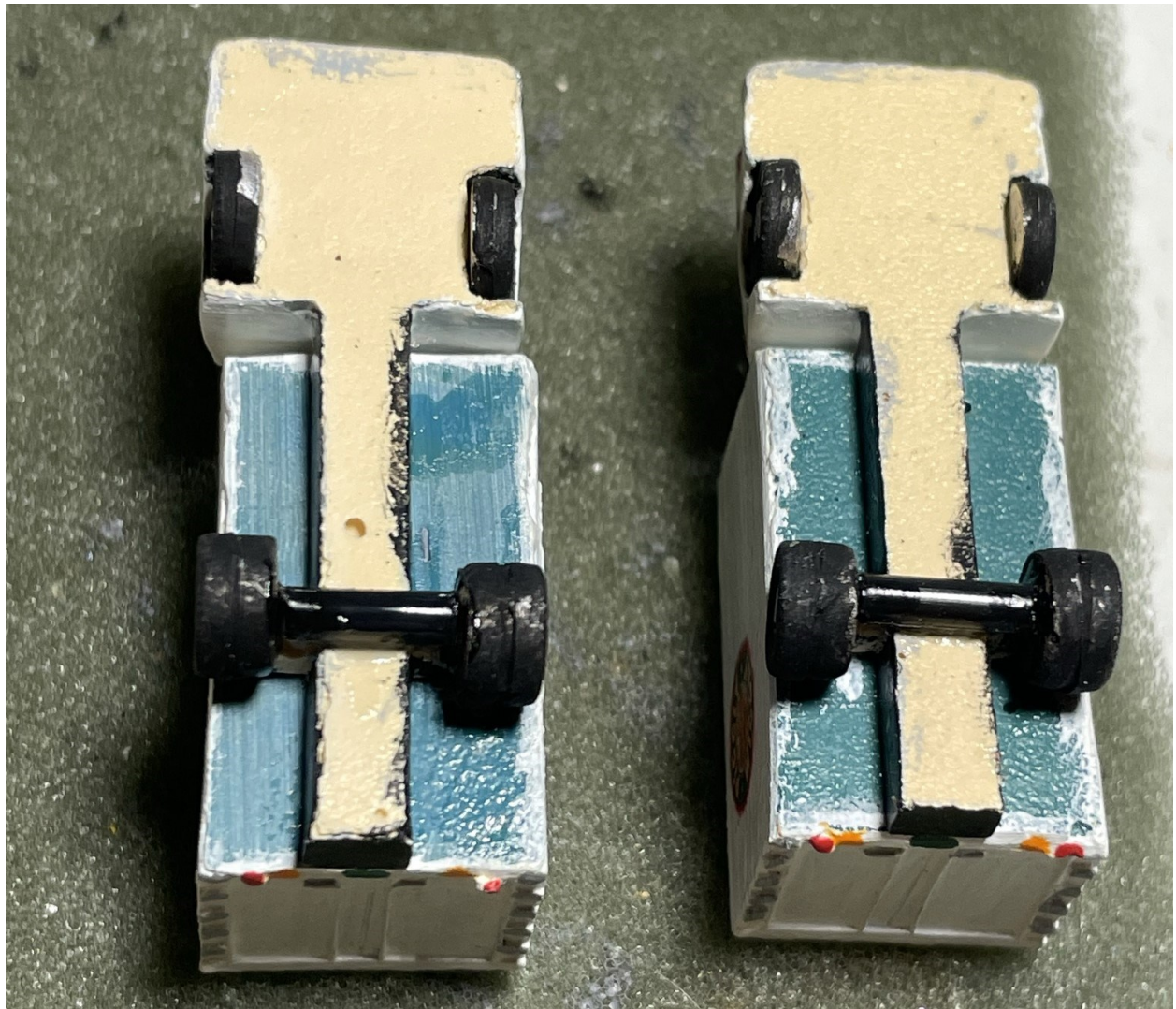
body holding the top of the wheel, it is trickier to align and stabilize the wheel while the super glue sets.

[N-Circle_23-10-28_Magnuson_ReeferVans-1](#)



Once the third wheel is secure, attaching the fourth wheel on the other side of the rear was a little easier. Due to the weight of the solid van box, the trucks would not sit squarely on three wheels, so the platform was still required, but the height was set by the first rear wheel.

As noted, the mounting peg for the rear wheels is small and set high, so it only intersects the top of the wheel's backside. One of the wheels came off when handling the truck, even though the superglue had cured for more than a day. It was clear that additional reinforcement would be required. Therefore, I cut segments from a black, small-diameter leftover plastic sprue to the length of the inside spacing between the wheels and glued this to the underframe and the inside of the two wheels. These pieces will not be visible from normal viewing angles, but even if seen, they look like the axle you would expect to be there.



Having made the Piggly Wiggly decals, I decided to apply a set to a Classic Metal Works IH R-190 van truck for 1950s scenes, as the model of the store is generic enough to be used in both the 1950s and 1980s, if one is not an expert on the history of Piggly Wiggly logos... And I used a pair of 1950s HP Hood and Sons Milk decals I created for the delivery truck described in Update 16 from December 2022 on a second identical CMW truck. CMW vehicles are sold assembled and painted, so all I did here was add the decals to these white vans.

The finished trucks are shown here. Unfortunately, the red outer ring of the decals ran some when I applied the clear coat spray, even though the decals had dried for two days.

[N-Circle_23-10-29_Magnuson_ReeferVans-1](#)



[N-Circle_23-10-27_CNW_DecaedTrucks-3](#)



The other four 1980s kits were a Garrick Gilham's Winnebago RV that has been on my "To-Do" list for years and three Road Apples kits. I attempted creative striping of the Winnebago and the Road Apples 1969 Hurst Olds after researching them on the web, as can be seen here. The results aren't as crisp as I would like, but... Perhaps somewhere there is a decal set for the Winnebago "W" in N-scale, I don't know.

[N-Circle_23-10-29_RoadApples-GG_Vehicles-1](#)



[N-Circle_23-10-29_RoadApples-GG_Vehicles-2](#)



The vehicles in this Update are similar to the vehicles discussed in previous N-Circle Updates. They will make decent models for filling side streets and parking lots, without being "magazine cover" quality. Painting details on N-scale vehicles is very difficult even with the steadiest hand and sharpest eye! One only can take solace in knowing that few of your friends can see well enough to judge the results, unless they take a closeup photo and enlarge it. For those photos, use a Classic Metal Works vehicle, like everyone else does. These custom painted vehicles are only so that your overall layout doesn't look like a CMW catalog!

As discussed previously, I only use brush-applied acrylic paints, for ease of use and cleanup, and I do not own an airbrush. Though I cannot imagine how one would mask an N-scale vehicle to use an airbrush!

My painting and detailing process has evolved through the multiple rounds of projects described in previous N-Circle Updates. Therefore, my current recommended painting sequence is:

1. Grey primer over all surfaces
2. Black paint on all surfaces of wheels. If they are already on the vehicle, apply before the body paint. If they are separate in a kit, leave them on the sprues to make them easier to handle (An HO scale modeler can't imagine how small an N-scale car wheel is to handle...!)
3. Body color over all body panels using a small brush – don't worry if it gets onto windows and bumpers, etc. Apply multiple coats as needed to cover, lighter, brighter colors require more coats to cover. A few imperfections are okay, as there will be a final touchup step later
4. For solid windows on resin vehicles I use a medium grey color, some people prefer a darker color, or with a blue tint
5. Chrome paint on bumpers, window frames, grill, door handles, etc.
6. Chrome paint or other color as desired for wheel hubs. Use the "stamp dowel" as described in Update 15, October 31, 2022 for ease of creating a centered circle
7. Add red and orange signal lights as appropriate for the vehicle and colored license plates
8. The final touchup of the body color shouldn't require repainting all of the panels, just using a very small brush or toothpick to cover over-runs from the various detail paints
9. Add decals if desired for commercial vehicles
10. If the vehicle has open windows, use Micro-Scale Kristal Kleer or equivalent to fill them in. N-scale window openings are so small this is easy to do with a fine wooden toothpick. I also use a drop to create headlight lenses.
11. Spray on a clear coat to protect everything after all paint and decals are dry. Some people prefer a dull coat for older vehicles or a gloss coat for newer vehicles – experiment with what you prefer. I use Testor's Spray Lacquer
12. Glue on wheels. Waiting until the end eliminates the need to mask them as I did in Update 13, September 5, 2022. They should be okay if they are not protected with a clear coat, as long as the vehicle is not handled too much. Or clear coat them in a large group, as I did for some vehicle sets

Like the vehicles in Update 15, I added green license plates to all – fine for Vermont in the 1950s, but what about Louisiana 1950s operating sessions?! Well guess what, a quick Google search reveals that Louisiana license plates in the 1950s were dark green with light yellow characters – very similar to Vermont – we're good! Needless to say, I am not lettering "VT" versus "LA" on these N-scale plates!

While I stated in N-Circle Update 15: "This completed all of my vehicle kits for the 1950s", that wasn't entirely true, and I purchased a few more kits after that. But if I don't purchase more, it is true now... And while I made a start on the 1980s vehicles kits in the cabinet, there are more to be completed with the return of warm weather in the spring.

It took 43 hours to complete all 37 vehicles discussed in this Update, thus a little more than an hour per vehicle, consistent with previously described "mass production" kits projects and way more efficient than if they were done individually.

In N-Circle Updates 11 through 17 I have described building and painting 74 vehicles models from many types of plastic and metal N-scale kits. These were kits I had purchased over the years and were on my "bucket list" to build some day. Many of the kits were a challenge to

build, and painting any N-scale vehicle with any level of details is a challenge. Would I recommend it to others? Only if you have very good near vision and a steady hand and the patience to deal with the challenges. Most would agree that the vehicles I have produced are “okay” quality for populating a model railroad layout with diverse models that are not the same as the Classic Metal Works vehicles you see in every N-scale layout article. And they are less expensive, if you already have a collection of paints and tools to do the work. But if you only need a few nice vehicles for a small, high-profile scene, spend the money on CMW or Athearn vehicles!

To conclude, in these final photos we find the new Piggly Wiggly truck and the Farmers Market truck from Update 15 making deliveries in front of the Piggly Wiggly store, while the recently completed Fresh Eggs van delivers to Rosie’s Coffee Shop next door for the local police’s breakfast. Down the street, the Hood’s Dairy truck makes a delivery to the A&P store, joining a commercially available Classic Metal Works A&P truck. This is why we create custom vehicles – to complete a diverse realistic scene in our railroad town.

Now, I need to redo the parking striping in front of those stores, so the trucks can back into the alleys for deliveries...!

[N-Circle_23-11-14_VehicleScenes-4](#)



N-Circle_23-11-14_VehicleScenes-3

