

## [N-Circle Railroad Update 14 – October 8, 2022](#)

In this update we will discuss mass-producing N-scale pewter metal vehicles kits that have been in the “To Build” cabinet for years. When building vehicle kits, there are multiple colors that are commonly used across most vehicles: black tires, red taillights, orange turn signals and marker lights, and chrome trim. If you do each vehicle completely before starting the next, you will spend more time mixing paints and cleaning paint brushes than actual painting.

Therefore, I selected six kits from the 1950s, as the N-Circle Railroad layout is currently set for 1950s operations, then added a seventh 1980s ambulance. We will expand upon the techniques touched on in Update 13 from September 2022 for efficiently working on multiple similar vehicles in parallel, to reduce the time required to work through 30 years of collected kits!

Upon opening these seven, I learned there can be a wide variation in the complexity of kits even within the same manufacturer – the GHQ fire trucks require a very high level of skill to assemble many very tiny and delicate parts, while their Metro Delivery truck and Ambulance are one piece that just requires painting! I bought most of these GHQ kits in the late 1990s, but they are still produced and can be purchased new today.

After examining all seven kits, I decided to build the three simpler 1950s kits first, then do the more difficult three fire trucks in a second pass. None of these three kits had major flashing to remove like some of the plastic vehicle kits discussed in previous N-Circle Updates. Just a few very fine metal stringers, easily removed with a sharp hobby knife.

This photo shows the parts for the first three kits after removing any flashing, then applying a coat of Vallejo Grey Surface Primer. Hopefully the primer will help the acrylic color paints adhere better to the metal. I labelled six sections of a piece of white copier paper to lay the parts on in a divided and organized way while paints and glues dry.

### [N-Circle\\_Vehicles\\_22-09-01\\_1](#)



Here we see the three after initial progress with painting and assembly.

[N-Circle\\_Vehicles\\_22-09-01\\_2](#)



And again, with all seven kits in progress together, with the first three nearing completion.

[N-Circle\\_Vehicles\\_22-09-03\\_1](#)



For assembling pewter metal kits, I use Bob Smith Industries "Insta-Cure+" CA cement. It comes in an easy-to-use bottle which allows dispensing single drops. I put a few drops on a "Super-Gluing Pad," an old piece of styrene, then apply the cement from this pool to the parts with the end of a sharp wooden toothpick, as seen in this photo.

[N-Circle\\_Vehicles\\_22-09-01\\_3](#)



I use Polly-S and Polly-Scale acrylic paints purchased over the years, which unfortunately are no longer made. Paints purchased new as far back as 1995 are still good, though now that I am opening and using them, some are drying up and have to be discarded. I apply the paints with small brushes, as I do not have a spray gun and spray booth, though I cannot imagine how one would mask these tiny vehicles for isolating areas for using a spray gun!

### **GHQ 1950s Metro Delivery Van Kit**

I originally purchased this kit to use as a Borden's Milk delivery truck, but later purchased a custom painted Borden's truck on eBay, so for now I will just paint the body white and add details and may decal it for some specific purpose at a later date. This was the simplest of the kits, being a single molded shape, only requiring painting

I painted the windows dark grey, then applied a layer of Micro-Scale Krystal Klear to look like glass, like I did with the school buses in the previous N-Circle Update 13. After everything was dry, I sprayed on a coat of Testor's clear Gloss Cote

### **GHQ 1940s International Dump Truck Kit**

This kit was the next step in complexity, having four separate pieces plus the wheels, but all relatively large and easy to assemble.

The kit includes a hydraulic cylinder which can be used to hold the bed up in the dumping position, but I just built it with the bed down for travel. The kit also includes tiny round rearview mirrors on a single post, to be cemented perpendicular to the cab. I estimate they would survive about two minutes of handling, and 95% of my N-scale vehicles do not have mirrors...this truck will not either. Note that in the package photo, they didn't add them either!

I used CP Yellow paint on the cab, and Pullman Green on the dump body, reminiscent of the colors of the town dump trucks where I grew up. Then a watery wash of wood tan on the inside of the dump body to simulate dirt.

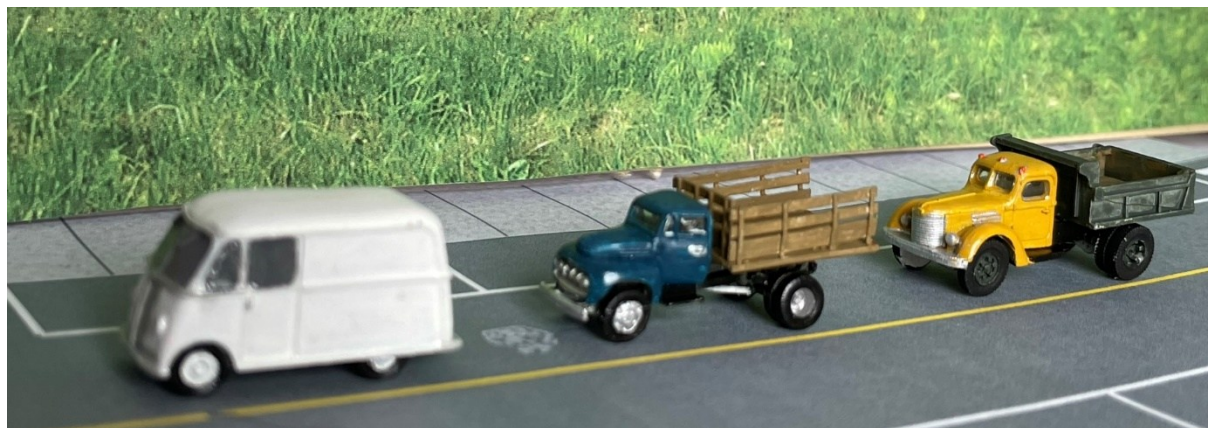
This kit has open cab windows, so I filled them with Micro-Scale Krystal Klear, then sprayed Testor's clear Gloss Cote on the cab and Dull Cote on the dump bed before gluing the bed to the chassis.

### **C&C Minatures 1951 Ford F5 Stake Truck Kit**

This kit was a bit more involved than the dump truck, with nine separate pieces plus the wheels, and requiring aligning the tabs on the bottom edge of the bed sides with slots in the bed. This kit also has open cab windows, which I filled with Micro-Scale Krystal Klear, then sprayed Testor's clear Gloss Cote on the cab and Dull Cote on the bed before final assembly.

Here are photos of the first three completed kits.

[N-Circle\\_Vehicles\\_22-09-05\\_4](#)



[N-Circle\\_Vehicles\\_22-09-05\\_5](#)



[N-Circle\\_Vehicles\\_22-09-05\\_6](#)



Having completed these three, I moved on to the more difficult emergency truck kits.

### **GHQ Ambulance Kit**

Like the GHQ Metro Delivery Van above, this kit was a single metal piece, so no assembly was required, only painting. Though with many warning lights on all sides of the vehicle, even the detail painting required quite a bit of time and very careful work.

Note that GHQ does not include any decals in their kits, I used decals from CMR Products to complete the detailing, then applied a spray coat of Testor's Gloss Cote.

### **Showcase Minatures Mack B Fire Pumper Truck Kit**

This kit has a metal cab and chassis and a plastic resin pumper bed, but was much simpler than the two GHQ fire truck kits that will follow.

I painted the cab and bed before assembling - not having an extensive collection of paint colors, I mixed a darkened red for the three fire trucks with ten drops of Polly-Scale Signal Red and two drops of Polly-Scale Rock Island Maroon. I then used Micro Scale Kristal Klear for the cab windows, rather than their difficult windows, like I did for the Shell wrecker kit in Update 11 from December 2021.

Another lesson in never throw anything away: The kit came with a dome light for the cab roof, on a tiny single sprue. Somehow that got lost in the shuffle, but I found a piece of small diameter plastic sprue in silver-gray with a round end in my collection of sprues, which after snipping off the end and applying a bit of red paint for the light, it serves well as a replacement for the lost part!

This Showcase Minatures kit does not come with any instructions, but unlike the GHQ trucks, it only has a few large pieces, so assembly is pretty obvious. They do not include decals, but I used decals from CMR Products to match the International Harvester version of this pumper truck that I detailed last year. After everything dried, I applied a spray coat of Testor's Gloss Cote to finish.

The following photos show these two finished models:

N-Circle\_22-09-12\_EmergencyVehicles\_1



N-Circle\_22-09-12\_EmergencyVehicles\_2





### **GHQ American LaFrance Pumper and Ladder Fire Truck Kits**

I bought these two kits a few years ago and even though I already have two fire pumper trucks for the 1950s fire station described in N-Circle Update 7 from April 2021, I decided to build them as alternatives for the scene. And to test my modelling skills, as these are by far the most challenging kits I have built to date. I built the pumper and ladder truck together, as they are very similar kits.

The kits come with extensive instructions, which are necessary for preparing and attaching the many detail parts. However, they are marginally adequate – the photos are very low resolution, of insufficient clarity to see the parts they are showing to install, maybe they have improved the graphics in their instructions in more recent releases of the kits.

The instructions say to complete all of the assembly first, then paint the model. But I had no idea how one could avoid getting the red body paint on the many grab bars, mirrors, etc. and get a good coat of the red. Therefore, I brushed on two coats of red first, before beginning the assembly.

The cabs for both trucks did not fit on the chassis and required extensive filing to get them to fit. So test fit everything before opening the glue! The next step was to drill out the dimples in the body to accept the many handrails and mirrors, using a #80 drill bit and a hand pin vise as shown in this photo. I used a piece of foam to protect the vehicle while holding it in a small clamp-on vise on the workbench.

[N-Circle\\_22-09-10\\_GHQ\\_FireTrucks\\_1](#)



At this point I diverged to complete assembly of the pumper truck before drilling the holes and starting assembly of the ladder truck, to learn if the holes really were done correctly to allow assembly.

Mounting the wheels was the easiest of any kit, as square notches on the wheels fit onto square pegs on the body, making it easy to glue them into place straight. An odd feature, given how

difficult the rest of the kit is! Having said this, when I later did the wheels on the ladder truck, I found the guides on the back of the front wheels are slightly offset – no mention in the instructions of a right versus a left, but if you swap them, they don't quite fit in the wheel well opening!

I didn't attempt the 90-degree bent handrails that were supposed to go around the hose reels on the pumper truck. The directions were not correct for these, so I did not know to drill the holes for them when drilling the others.

After completing the basic assembly of the pumper truck, I returned to the ladder truck. Assembling the main extension ladder turned out to be easier than expected. I cut the three thin etched metal ladder sections from the metal sheet using a hobby knife. To bend the side railings up, I placed the ladder on a wood block, with the fold joint aligned to the edge of the block, then held a thin plastic ruler along the fold joint, to hold one side down flat, while gently folding the other side upwards from below. (I neglected to take a photo of this process, but hopefully this written description is clear.) This technique worked well for all six folds, and the three sections nested within each other without much trouble. I glued them together with the second and third sections extending slightly longer forward than the base section, to visually highlight that in fact there are three sections.

The kit is designed so that the truck can be built "in action" with the stabilizer legs down and the ladder raised, rotated and extended. But I am not planning to have a burning building scene on the layout, so I assembled the kit in the simpler (and less delicate!) travel position with the ladder down and the legs up.

The rear-view mirrors are one of the most difficult assemblies in N-scale modelling....! They are made from the very thin sheet metal. After cutting them from the sheet, you have to carefully bend the two mounting triangles to the correct angle to align to the holes drilled in the cab shown above. There is a tiny bar that is supposed to connect at a diagonal between the two support brackets. After having this break off on the first two mirrors, I just cut them off and didn't even try for the second truck! They are not necessary for attaching the mirrors to the cabs.

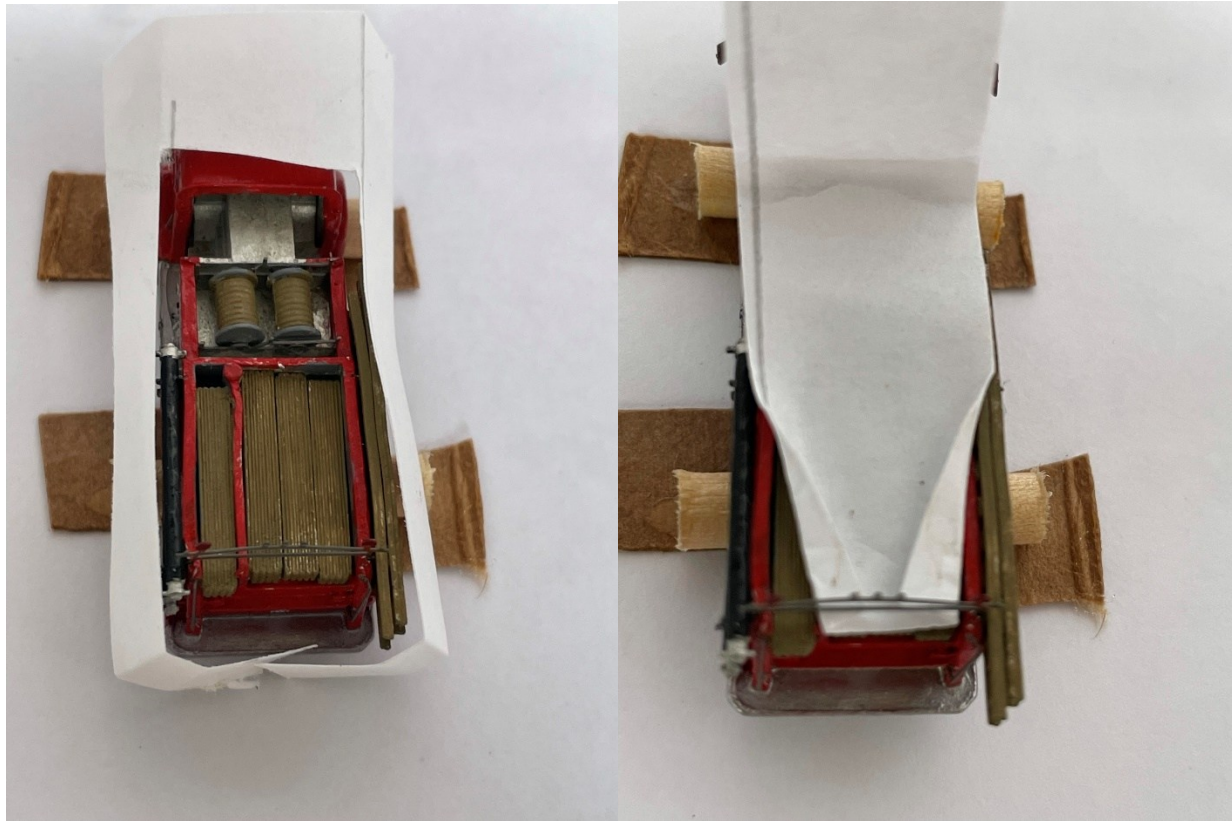
To attach the mirrors, I eventually developed the technique to lay the truck on its side on a piece of foam, then grabbing the mirror plate with fine needle-nose pliers, dip the mounting points in a drop of super glue on the glue pad, then guide them into place on the cab. This actually worked for all four mirrors in the end, as will be seen in the final photos!

After all the handrails, hoses, ladders, etc. were attached, I applied touchup red paint around mounting holes, etc. as needed, but this was much easier with the body already painted red. I didn't have any brass-colored paint, so I painted the bell on the front bumper of the two trucks with a couple of dots of CSX Yellow applied with a sharp toothpick and called it "close enough." I then again used Micro Scale Kristal Klear for the cab windows and added decals from the CMR Products emergency vehicles set used on the vehicles above. With all these emergency vehicles to complete, I had to purchase multiple more sets!

The final step was to apply a coat of Testor's Gloss Cote to stabilize the decals and provide a harder protection for the acrylic paints. On the pumper truck, I wanted to use Dull Cote on the hose bed – it should not be shiny like the body surfaces. As with the grain trucks in Update 12 from September 2022, I did not want to attempt intricate, very small mask taping of these surfaces. But again with N-scale, it is easy to make simple masking structures cut from copier paper to do the job. We see here first a paper mask which wraps around the truck cab and sides, exposing only the hose bed for the Dull Cote, then a second simple rectangle to mask the

hose bed while applying Gloss Cote to the rest of the truck. Neither mask required tape to hold it in place while spraying. I also reused the wheel masks introduced in Update 13.

[N-Circle\\_22-10-07\\_GHQ\\_FireTrucks\\_1](#) & [N-Circle\\_22-10-07\\_GHQ\\_FireTrucks\\_2](#)



I sometimes capture from eBay listings photos of completed kits that I have not built yet. I happened to have done this for both of these GHQ fire trucks. Not surprisingly, those builders also did not add all the handrails and detail parts! On one, you can see where they drilled out the holes for the handrails on the cab but gave up on ever installing them!

Therefore, I am fairly proud of how well these kits two kits came out in the end, as shown in the following photos. While there are certainly imperfections, recognize these are zoomed-in photos of trucks that are only two-inches long. Therefore, they definitely exceed the requirements to pass the “10-foot rule” for most folks’ vision!

N-Circle\_22-10-07\_GHQ\_FireTrucks\_4



N-Circle\_22-10-07\_GHQ\_FireTrucks\_5



N-Circle\_22-10-07\_GHQ\_FireTrucks\_6



N-Circle\_22-10-07 GHQ FireTrucks 7





Finally, we see the two trucks at home in the fire station built in Update 7 from April 2021. Don't ask why they are halfway out the doors – I guess the fire crew just likes to show them off on a sunny day after washing them! And someday we will update the scene, so the building base is level with the sidewalk, eliminating the distracting shadows under the cabs...



I would not recommend these two fire truck kits to any but the most experienced N-scale modelers. They took about 6.5 hours each to complete over many days to allow glue and paint and decals to dry between work sessions, even with the efficiencies of doing them together. They are nice kits and will look very good in the right hands. But they have a lot of tiny parts which need to be manipulated exactly to be attached correctly. Just removing the metal flashing from the ladders before assembly is an exercise requiring fine dexterity and very sharp eyesight! Most parts have incredibly tiny pigtailed metal on corners and multiple points, including pins which are to go into mounting holes. These must be removed with a sharp hobby knife. I think you would have to build these kits two or three times to practice before having the insight to really build them well, to magazine cover quality.

When complete, they are very fragile, so they may not see a lot of use on the layout, but nonetheless, I am pleased to have actually completed them!

The entire project of these seven vehicles took about 22 hours to complete. I have ten more pewter metal kits to build, most of them 1980s construction vehicles. Some appear to be fairly simple, while some are moderately difficult, but they will probably go on hold for now, as we explore other modelling challenges for the N-Circle Railroad.

## Burt Industries International Fire Tanker Truck

While I had all the fire truck parts and decals out, I decided to dress up an International Fire Tanker Truck from Burt Industries that I had purchased back in 1994. It is a resin kit that came assembled and “Ready-to-Run,” but as can be seen in this “Before” photo, it was pretty rough. No details, and it had not been assembled correctly – the chassis was not trimmed and inserted properly into the body, thus it sits high over the rear wheels. But it was glued strongly, so this alignment could not be corrected with risking breaking the truck more than I wanted.

[N-Circle\\_22-10-01\\_BurtTanker\\_Before\\_1](#)



Nonetheless, I added a ladder and a hose left over from the kits above and used Micro Scale Kristal Klear for the cab windows. I then added decals from the CMR Products sets used on the trucks above, and the finished product now is more interesting for use on the layout, as seen in the following “After” photos.

N-Circle\_22-10-07\_BurtTanker\_After\_1



N-Circle\_22-10-07\_BurtTanker\_After\_2



## School Buses

Just to show that we follow-up on things here at the N-Circle Railroad, when I bought more decals for the fire trucks from CMR Products, I found they also have decals for school buses. Therefore, I bought a few sets and finished the school buses from the October 2022 N-Circle Update 13. While doing these school buses, I also added decals to a modern school bus made by PD Marsh Models, which had been painted by Neal's N-Gauging Trains and resold. The decal set of course did not contain "Lakeview" or "Maple Corners," the Louisiana and Vermont town names on the N-Circle, or "Park Trails," the name of the school, and I wasn't going to spell them out in individual letters on both sides of four buses...so I used the generic "Regional Elementary" naming to work in all scenarios. I added Microscale Kristal Klear windows to the modern bus, which will be used with the same school scene as seen in previous Updates for the 1950s, but will "reset" the period of the scene to the 1980s. Here is a photo of one of the finished 1940s buses with the 1980s bus.

### [N-Circle\\_22-10-07\\_SchoolBuses\\_2](#)



**Modeler's Tip:** When attaching the grab irons on the sides of the cabs, at first I struggled with holding them with my fine-point pliers. Upon closer examination, I found that one tip was slightly bent, and super-glue had accumulated in the jaws which was holding them slightly apart. After gently straightening the tip in a metal vise and filing the inside of the jaws smooth again,

installing the last four handrails on the ladder truck went much easier! A lesson in maintaining one's tools for optimum performance!

**Footnote:** When I saw the article title on the cover of the recent November 2022 issue of Model Railroader magazine: "*Build a Time Machine! This HO scale C&NW layout can switch eras*" I thought "He's stealing my N-Circle Railroad idea!" But it appears that the layout only changes periods by changing the trains, not the scenery. There are only a few buildings on the layout, and they are fairly generic structures with minimal signage, so they can span 1956 to 1995.