FUNARO & CAMERLENGO

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ERIE Dunmore Shops Covered Hopper

S Scale S 212 – S 214 $39.99
O Scale O 102 – O 104 $59.99

About the prototype:

In 1951. the Erie Railroad's Dunmore Shops did the same exact thing that you're about to do.

They built some freight cars for their railroad... from kits!

The General American Transportation Corporation (GATX) sold covered hopper components to various railroads for assembly in their own shops. Using standard designs of the era, these prototype "kits" allowed railroads with well-equipped shops to keep their steam-era work forces busy during a time of great upheaval in the railroad industry. Recall that in the years immediately following World War Two, numerous shortages in all sectors of American industry were caused by the dislocations of returning to a peacetime economy. Demand for freight cars was abnormally high during this period.

Although the general construction details of the 100 prototype Erie "Dunmore" covered hoppers resembled those of classic steam-era 37-foot cars, the Erie-builts were a whopping four bays long, giving them a highly unusual "quasi-modern" appearance. All indications suggest these cars primarily hauled grain and feeds, cargo considerably less dense than loads like cement. A greater volume could therefore be carried in a single car without exceeding the load rating of the trucks.

Remarkably, the Dunmores remained in interchange for their entire lawful life span: forty years. In fact, they outlasted their home railroad by over 30 years. Besides Erie black, they wore the liveries of both of Erie's successor roads: Erie-Lackawanna red and gray, and Conrail red and gray.

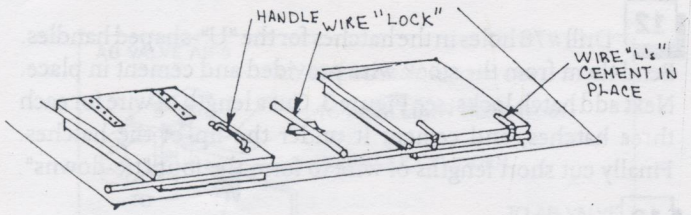


Figure 3

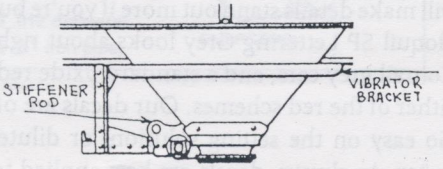


Figure 1

minimize warping or distortion.

About this kit:

We were first attracted to this car when we saw an early-50's photo of a string of covered hoppers, and our attention was caught by its great length. Boy, did it stand out!

Chuck Yungkirth's article about the Dunmores in the January 1992 *Railroad Model Craftsman* is definitely worth reading. After the appearance of the article, additional research documented a fifth paint scheme used on the car, and we're able to offer them all.

Our research in preparing this kit uncovered other users of GATX "kits" (such as Union Pacific sugar service cars) and we plan to offer two-bay and three-bay variants in the future.

Tools and adhesives needed:

Use a medium-grade gap-filling ACC adhesive (such as BSI 107 from CHS). We also recommend that you reinforce the main body components (sides, ends, roof, etc) with a bead of two-part epoxy (BSI201 or 205) applied to the inside seams after the basic body is assembled and square. This is particularly important if your model will receive a lot of handling, and especially if you have some ham-handed friends who like to ooh and aah at your superb work. Use liquid styrene cement for styrene-to-styrene joints only.

For construction, you'll need your favorite hobby knife, a supply of fresh #11 blades, a very sharp pencil or scriber, #76, #78 and 1/16" drills, pin vise and a modeling ruler.

If you want the very best results, we also strongly recommend the use of a surface plate (such as a thick sheet of glass), a large sheet of fine grit (#300 or finer) sandpaper, some masking tape and a modeler's square (such as a General 2-, 3- or 4-incher from CHS). We'll explain why in the instructions.

Painting:

Our resin is compatible with any model railroad paints in use today. If you find small surface blemishes such as those that result from tiny air bubbles, simply fill with any modeling putty and sand smooth. After construction and before painting, thoroughly wash the entire model in lukewarm water using a clear dishwashing detergent (such as Joy) to remove casting and skin oils. Do NOT use any of the dishwashing liquids that contain lotions or oils.

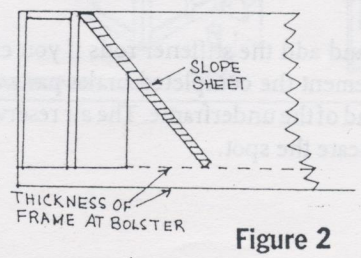


Figure 2

1 Remove flash from all castings. Always cut, never break, flash off. Use files sparingly, only as last resort. To remove flash from roof casting and true up sides and ends, tape a sheet of fine sandpaper to a surface plate, and gently sand an entire edge at once by pulling the part over the sandpaper. Be careful to hold it perfectly perpendicular. When finished, wash filings off all parts to avoid gluing them onto your model!

2 Carefully fit sides in place, cementing them to the roof one at a time. If you wish, use one or two tiny dabs of Goo or Pliobond to hold them while you adjust them. Use ACC when you're satisfied. Add the ends next. The ends are purposely cast slightly overwidth, and they fit between the sides. Make your width adjustments starting from the lefthand side first. Remember the grabirons must span the distance under the two boltheads. Because these parts are made in flexible rubber molds, it's inevitable that some slight size variations will occur making filing or sanding necessary. Be patient and use a surface plate and square. Careful and precise fitting here will result in a superior model.

3 At this point, you have the basic body shell (4 sides and a roof) complete. Assuming it's all square and sits perfectly on your surface plate, now is the time to reinforce all the major seams with epoxy from inside the body. Put the body aside for a day or two and let it cure.

4 Cement the 12 roof hatches in place, centering them on the cast-on platforms. Cement the roofwalk in place, followed by the endwalks. The endwalks are cemented to the edge of the roofwalk and the roof itself where the corner ladders are. Use the 1x2 styrene strip to make the supports.

5 You have two choices when adding grabirons to the body. First, drill #78 holes in all locations to accept premade drop grabs. It will be necessary to cut them so their legs do not protrude through the back. The second method, easier but less accurate, involves drilling holes only for the two bottom grabs on each end and the bottom right hand grab on each side (6 total). Trim these 6 and cement in place. Now cut 24 lengths of wire a scale 1' 6" in length, and cement them under the cast-on nut/bolt/washer details. You decide which method you like.

6 Sand or file underframe to fit the completed body. Drill underframe for truck attachment (self-tapping screws included) with 1/16" drill. Next assemble brake parts as shown in the reproduced (Tichy Train Group) diagrams. Use the cast brake part holder to hold assembled components. Add as much piping as you prefer.

Turn the underframe over and adjust the four vibrator brackets (the four empty rectangular castings) to fit over the hoppers. When they sit directly on the frame, cement them in place.

Trim the 8 vibrators and cement in place. Trim the "L" angles and

Drill out and add the stiffener rods if you choose.

Finally, cement the completed brake parts assembly to the top of one end of the underframe. The air reservoir location will help you locate the spot.

7 Measure the thickness of the underframe. Mark or scribe a line on the inside of the sides equal to that distance up from the bottom edge.

Adjust the two slope sheets so they fit snugly inside the body. The beveled edge fits against the roof, while the bottom edge is on the line. See Figure 2. Cement in place.

Now test fit the slope sheet supports. We suggest using a tiny dab of Goo or Pliobond to hold them to the tops of the bolsters while you shift them around. When you're satisfied, fix in place with ACC.

8 Now is the best time to complete the underframe. Add your couplers. Install the trucks. If you use NMRA weighting standards (you should!) the total weight of the completed car should be 4-1/4 ounces. (One ounce plus 1/2 ounce for each inch of length). So weigh all the parts, and add enough extra weight to the car floor to bring the total to 4.25 oz. We urge you NOT to use Goo or Pliobond to attach metal weights to the floor; their solvents will cause the underframe to warp over time. Instead, use double-sided tape or A-Line self-adhesive weights or ACC.

Test everything for smooth operation and check coupler heights. Then send it off to the paint shop for a coat of grimy black while you finish the carbody.

9 Assemble Ajax brake stand, wheel and chain, and the brake platform and supports. Set both assemblies aside to dry. Bend and cement the trainline to the "B" end. Cement tackboards in place.

Now cement completed brakestand assembly in place. Add bell crank to bottom edge of the end. Add connecting rod from the end of the chain to the bellcrank.

Finally, cement the brake platform assembly in place.

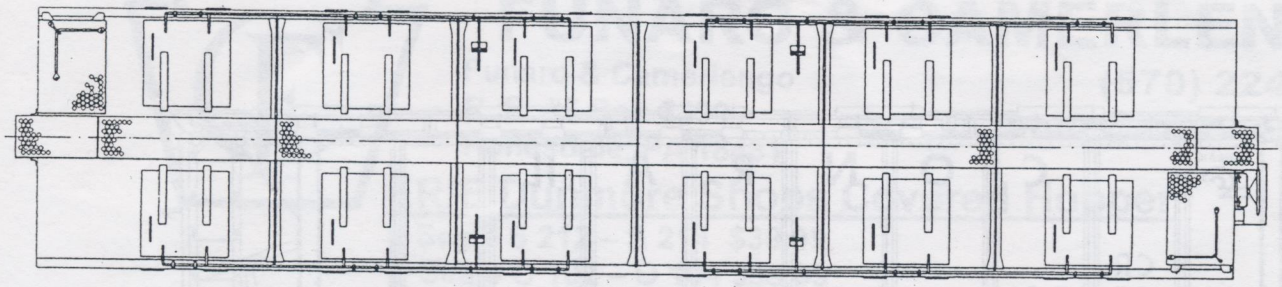
10 Drill endwalks for the roof corner grabs. Molded eyebolts are provided to form the center leg. Some people prefer to use a short piece of wire for this, so if you do, remove the molded eyebolt first. Bend and cement corner grabs in place.

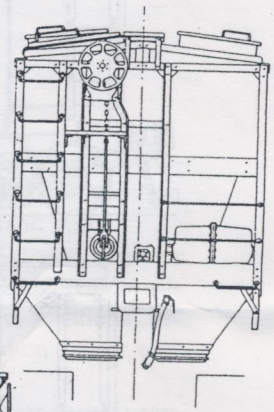
Bend cutlevers from the remaining wire stock. Drill #76 holes in the lefthand poling pockets for eyebolts. Cement eyebolts in place, but do not cement cutlevers in place yet.

11 Drill #76 holes in the side sills for the stirrup steps provided. We suggest you wait until final assembly to cement them in place.

12 Drill #78 holes in the hatches for the "U"-shaped handles. Bend them from the stock wire provided and cement in place. Next add hatch locks; see Figure 3. Cut a length of wire for each three hatches, and cement it under the lip of the hatches. Finally cut short lengths of wire to form the four "tie-downs".

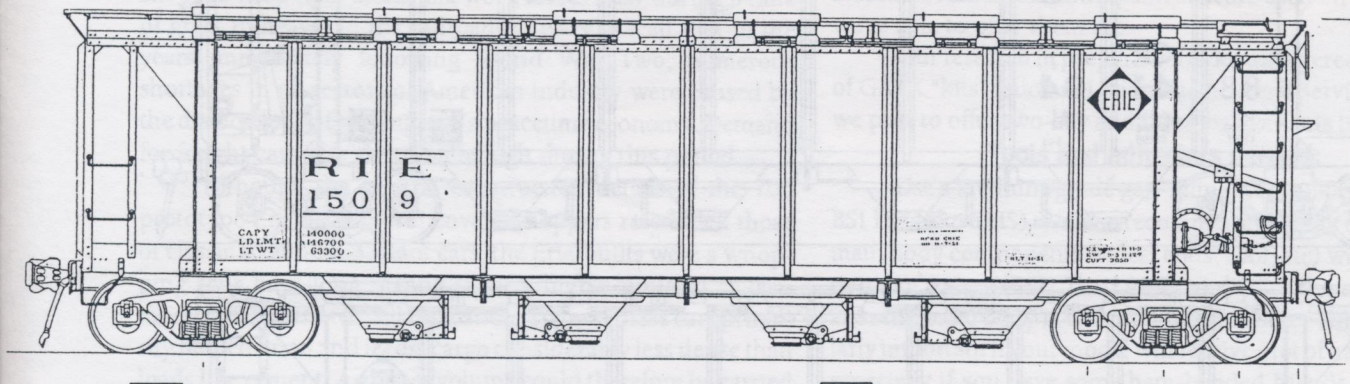
13 It's time to head for the paintshop. Give your masterpiece a good scrubbing with a soft brush, rinse well and dry thoroughly. Instead of dead black, a grimy or weathered black will make details stand out more if you're building the Erie car. Floquil SP Lettering Grey looks about right for the E-L and Conrail grey cars, and a standard oxide red is appropriate for either of the red schemes. Our decals are of the thinfilm type. Go easy on the setting solution, or dilute yours with some water. As always, decals are best applied to a gloss surface.





Drawings by Chuck Yungkirth, used with permission.

Erie/EL/Conrail four-bay covered hoppper
Built 1951; Erie R.R., Dunmore, Penna.



13 You're done! And now you're on your own. Add your couplers and trucks if you didn't do it in Step 8.

Do all your final test running, weighting, and any other performance things now, too. When you're satisfied, cement the painted, finished underframe in place.

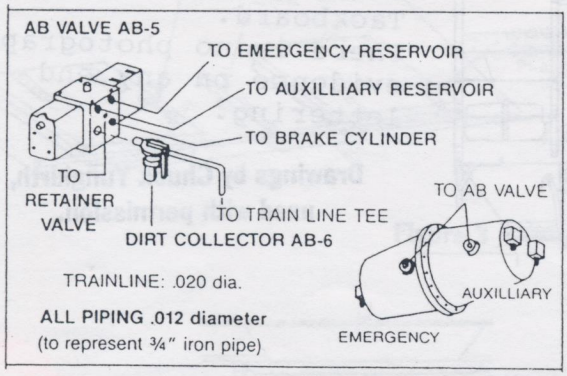
Now cement the cutlevers and stirrup steps in place.

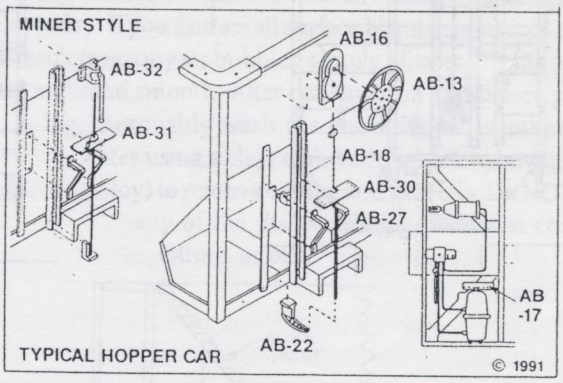
Do any touchup required, and add either a flat finish or weathering.

14 If you loved this kit, tell your friends!

We also greatly welcome any and all constructive criticisms, suggestions for improvement, ideas for future models and most of all, orders for more!

If you there's a car you'd really love to have, please drop us a note and let us know. If you have any photos and are willing to share, we'd like to know what you have.





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