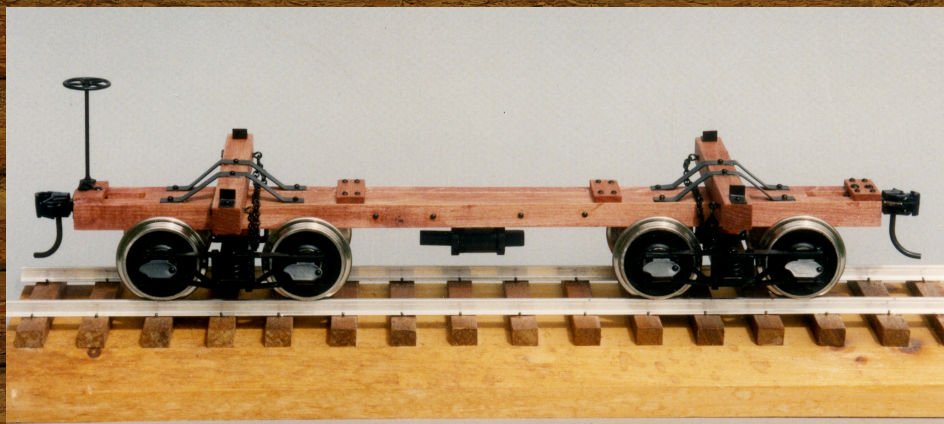


BUILD YOUR OWN ROLLING STOCK



HOW TO PRINT THE FULL-SIZE DRAWINGS:

- 1.** Using Adobe Reader, click on the printer icon at the top of the window. A box will appear with settings. Note the window at the right side of the box showing dotted lines (tiling) on the sheet to be printed.
- 2.** Under “Page Sizing & Handling,” make sure the “Poster” option is selected. This will tile the pages for printing.
- 3.** If you’d like your plans to print full size, make sure “Tile Scale” is set to 100%. If you’d like to print your plans to a different scale, then enter the percentage of enlargement or reduction in the “Tile Scale” box.
- 4.** “Overlap” should be set to 0.000 inches.
- 5.** Check the “Cut marks” box. This will print the cut marks onto the pages. With an X-acto knife and a straightedge, you can use these cut marks to trim off the excess paper. When the excess paper has been trimmed from all the sheets, the edges can be perfectly matched up and the sheets taped together into a single drawing.
- 6.** Click “Print.” The plan will be printed out on multiple sheets of 8-1/2” x 11” paper that you can then combine into single plan sheets.

Scale conversion chart

It can be frustrating and confusing when you're working in one scale but the plans from which you're working are in another. The chart below will tell you at what percentage the plans should be enlarged or reduced to suit your scale.

The scale in which you're working can be found in the top row. The scale the plans are in are listed in the left hand column. Simply find the your scale and the scale of the plans. The box that intersects both will tell you the correct percentage. Yellow indicates a reduction in size, while green tells you to enlarge the plans to the specified percentage.

| The scale of the plans | The scale in which you're working | | | | | | | | |
|------------------------|-----------------------------------|-------|-------------|------------|--------|-------------|---------------|--------------|------|
| | 1:32 (3/8") | 1:29 | 1:24 (1/2") | 1:22.5 (G) | 1:20.3 | 1:19 (16mm) | 1:13.7 (7/8") | 1:8 (1 1/2") | |
| | 1:32 (3/8") | 100% | 110% | 133% | 142% | 158% | 168% | 234% | 400% |
| | 1:29 | 90.6% | 100% | 124% | 129% | 143% | 153% | 212% | 363% |
| | 1:24 (1/2") | 75% | 83% | 100% | 107% | 118% | 126 % | 175% | 300% |
| | 1:22.5 (G) | 70.3% | 78% | 94% | 100% | 111% | 118% | 164% | 281% |
| | 1:20.3 | 63.4% | 70% | 84.6% | 90.2% | 100% | 107% | 148% | 254% |
| | 1:19 (16mm) | 59.3% | 65.5% | 79.1% | 84.4% | 93.6% | 100% | 139% | 238% |
| | 1:13.7 (7/8") | 42.8% | 47.2% | 57.1% | 60.9% | 67.5% | 72.1% | 100% | 171% |
| | 1:8 (1 1/2") | 25% | 27.6% | 33.3% | 35.5% | 39.4% | 42.1% | 58.4% | 100% |

Construction

Cut eight pieces of chain, each 1" long, and fit a cotter pin at each end. Fit the cotter pins into the holes in the trucks and the frame. Mount the trucks with #6 x 1/2" screws. Finally, mount couplers of your choice (Kadee #789 are recommended).

*1999 by Garden Railways and Northeast Narrow Gauge. These drawings may be photocopied by individual modelers for their own personal use. Copying for any commercial use or for distribution is prohibited without written consent from the publisher.

truck detail

side view

cotter pin

NWSL #8611-4
wheel set

This diagram shows the side view of the NWSL #8611-4 wheel set assembly. It features a long, rectangular metal beam with several circular holes along its length. Two large, black wheels are mounted on the beam. A cotter pin is shown inserted through a hole in the beam, securing the assembly. The entire unit is shown resting on a flat surface.

Technical drawing of a mechanical assembly, showing four views: bottom view, top view, end view, and side view.

Bottom View: Shows the base of the assembly. Dimensions include $\frac{3}{8}'' \times \frac{5}{8}'' \times 5''$ for the left side plate, $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the central plate, and $\frac{1}{4}'' \times 4'' \times 13\frac{1}{4}''$ for the right side plate. A $\frac{3}{8}''$ dia. hole is indicated in the central plate. A $\frac{3}{16}'' \times \frac{7}{8}'' \times 4\frac{3}{4}''$ stake is shown on the left. A $\frac{1}{4}'' \times \frac{3}{4}'' \times 4\frac{5}{16}''$ stake is shown on the right. A $\frac{1}{8}''$ dia. hole is indicated in the right side plate.

Top View: Shows the top of the assembly. Dimensions include $\frac{3}{8}'' \times \frac{5}{8}'' \times 5''$ for the left side plate, $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the central plate, and $\frac{1}{4}'' \times 4'' \times 13\frac{1}{4}''$ for the right side plate. A $\frac{3}{8}''$ dia. hole is indicated in the central plate. A $\frac{3}{16}'' \times \frac{7}{8}'' \times 4\frac{3}{4}''$ stake is shown on the left. A $\frac{1}{4}'' \times \frac{3}{4}'' \times 4\frac{5}{16}''$ stake is shown on the right. A $\frac{1}{8}''$ dia. hole is indicated in the right side plate.

End View: Shows the end of the assembly. Dimensions include $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the left side plate, $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the central plate, and $\frac{1}{4}'' \times 4'' \times 13\frac{1}{4}''$ for the right side plate. A $\frac{3}{8}''$ dia. hole is indicated in the central plate. A $\frac{3}{16}'' \times \frac{7}{8}'' \times 4\frac{3}{4}''$ stake is shown on the left. A $\frac{1}{4}'' \times \frac{3}{4}'' \times 4\frac{5}{16}''$ stake is shown on the right. A $\frac{1}{8}''$ dia. hole is indicated in the right side plate.

Side View: Shows the side of the assembly. Dimensions include $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the left side plate, $\frac{3}{8}'' \times \frac{5}{8}'' \times 13\frac{1}{4}''$ for the central plate, and $\frac{1}{4}'' \times 4'' \times 13\frac{1}{4}''$ for the right side plate. A $\frac{3}{8}''$ dia. hole is indicated in the central plate. A $\frac{3}{16}'' \times \frac{7}{8}'' \times 4\frac{3}{4}''$ stake is shown on the left. A $\frac{1}{4}'' \times \frac{3}{4}'' \times 4\frac{5}{16}''$ stake is shown on the right. A $\frac{1}{8}''$ dia. hole is indicated in the right side plate.

Labels:

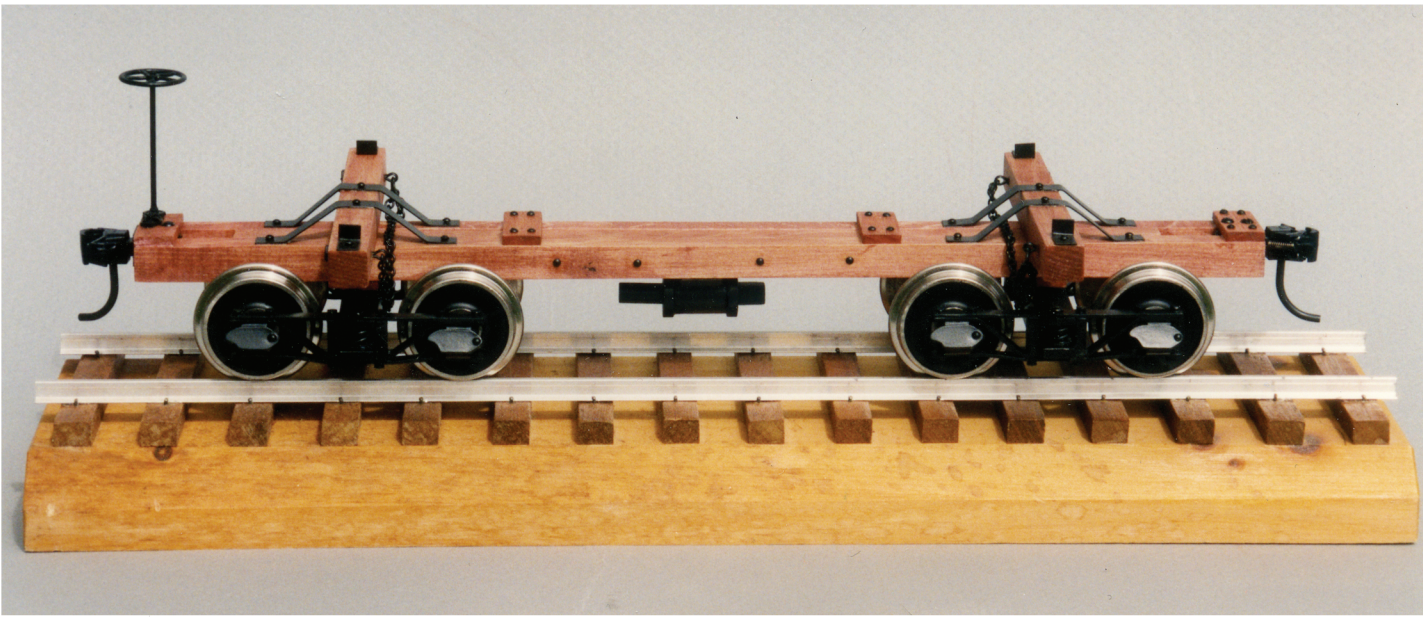
- bottom view
- top view
- end view
- side view
- brake wheel
- eyelet
- $\frac{3}{8}''$ dia. rod
- #18 x $\frac{1}{2}''$ escutcheon pin
- cotter pin
- $\frac{3}{8}''$ dia. hole
- $\frac{1}{8}''$ dia. hole
- $\frac{3}{16}'' \times \frac{7}{8}'' \times 4\frac{3}{4}''$ stake
- $\frac{1}{4}'' \times \frac{3}{4}'' \times 4\frac{5}{16}''$ stake

side view

GardenRailways.com 4

1:20-scale skeleton log car

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20-scale, skeleton log car. It has features commonly found in many narrow-gauge cars of this type. The model is 13 1/4" long x 4 1/4" wide. This scales out to a car that is 22' long, which is typical for these cars.

Construction

This model can be built from materials available in many hobby shops and building-supply stores. Alternatively, the stripwood can be cut on a table saw. Begin construction by cutting out the wood parts. Pre-stain these parts with thinned, oxide-red paint. Glue the wood parts together over the plan. Drill 1/16" and 1/8" diameter holes where indicated. Assemble the brake cylinder, paint it black, and glue it in place.

Now add the metal details. These should be pre-painted before gluing them in place. Use .016" x 1/4" brass strip for the metal straps. Cotter pins are the 1/16" x 1/2" variety and the nuts are #2-56. Finish the log car with trucks and couplers of your choice, painted oxide red..

This sheet is a supplement to the August 1999 issue of *Garden Railways* magazine. While supplies last, extra copies of these drawings can be had by sending \$1.50 per set (\$2.00 foreign) to: Sidestreet Bannerworks, PO Box 460222, Denver CO 80246 USA.

For those not possessed of the energy or equipment, a complete set of wood and metal parts (less trucks and couplers) for the log car is available for \$24.95 + \$5 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578.

©1999 by *Garden Railways* and Northeast Narrow Gauge. These drawings may be photocopied by individual modelers for their own personal use. Copying for any commercial use or for distribution is prohibited without written consent from the publisher.

