

7/8" scale, 2' gauge freight-car trucks

by Edward A. Stinson | Wiscasset, Maine



This plan will let you build 7/8" scale, 2'-gauge freight trucks on the cheap. The trucks are based on Maine prototypes. My originals were built of plastic and wood, with Sierra Valley 1/4" scale wheelsets and were assembled entirely with CA cement.

Construction

Begin by making all the parts necessary for one pair of trucks. Start with the straps, which are cut from .06" x .25" styrene strips. Note: When bending plastic strips, do not score the strip or it will break along the score line. Also make sure that the plastic is warm before making the bend. This can be achieved by placing it in warm water for several minutes.

Make eight spacers as shown on the plan. Now make the journals. Cut eight pieces of pine, each 5/8" square x 1/2". Drill a 3/16" hole at least 1/4" deep in the center of each block. Then flip the block over and sand the distinctive shape into the front side. A disk sander is particularly useful for this purpose.

Cut eight journal covers from 1/8" plywood. Glue a short (1/2") piece of 1/8" x 1/4" pine to the back of each cover (see plan). Cut and sand these to the same shape as the cover. Finally, drill a .04" hole in each cover.

Make the two bolsters from 3/4" x 3/8" pine cut to a length of 3 1/4". Notch the ends as shown on the plan. Using soft wire, such as #16 copper, form the dummy springs. Fit and glue these in place.

Assembly

After bending the plastic strips, assemble the four side frames. Pin the plan to a flat surface and protect it with waxed paper. Using pins to hold things in alignment, assemble the straps, spacers, and journals. When the glue has firmly set, drill 1/16"-diameter holes through the whole side frame, using the holes originally drilled in the straps as a guide. Fit and glue a 1/16"-diameter rod in each hole and glue a #2-56 nut to each end of it. Fit a #18 x 1/4" escutcheon pin in each cover, then glue the cover in place on the journal. Dry-fit the bolsters in the side frames. Remove excess wood from the bolsters with care.

Painting and final assembly

Prepaint the side frames, bolsters, and wheel faces to suit.

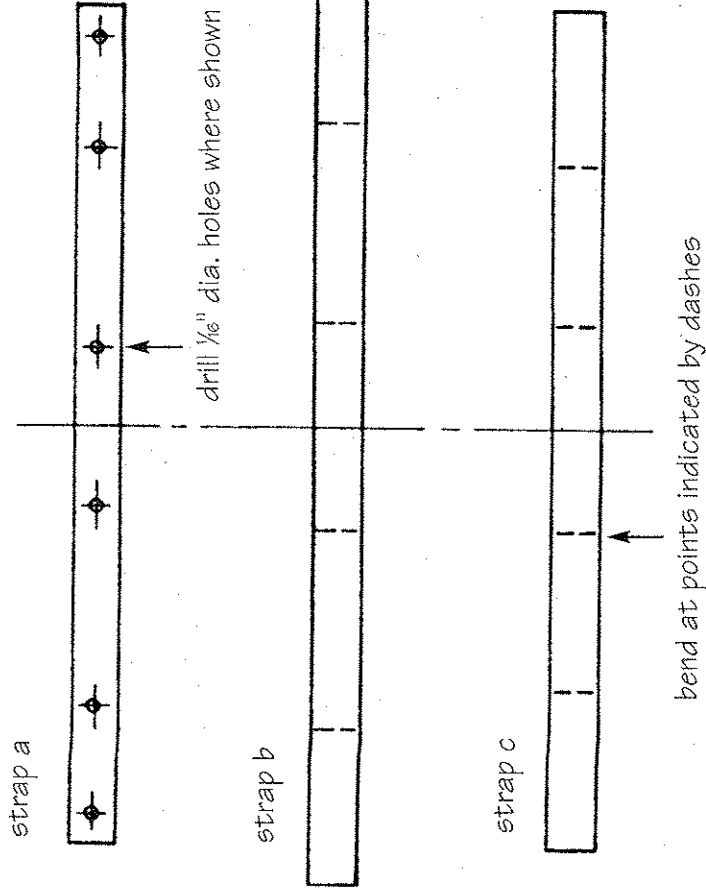
Fit 1/8" ID eyelets into the journals to act as bearings. Fit a bolster into one of the side frames. Slip #4 washers onto the ends of each axle, then slip the wheelsets into place. Fit the second side frame into place and adjust the alignment of the truck until it rolls smoothly. Then put a drop of glue on each bolster end, locking it in place.

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

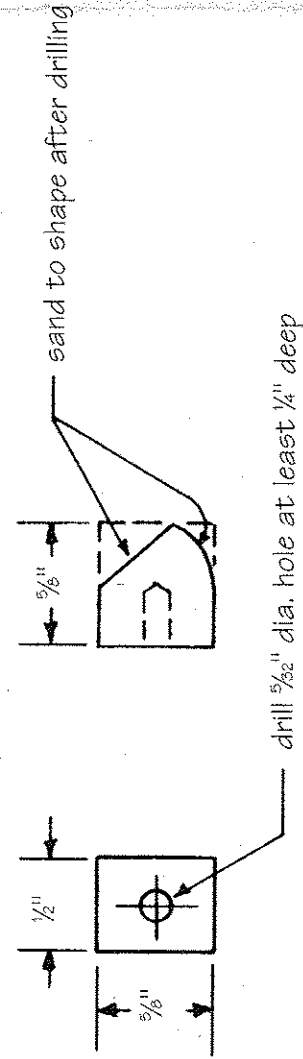
For those not possessed of the energy or equipment, a complete set of wood and metal parts for the trucks is available for \$34.95 per pair (plus wheelsets) + \$5 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578.

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

straps
cut 4 of each from .06" x 1/4" styrene

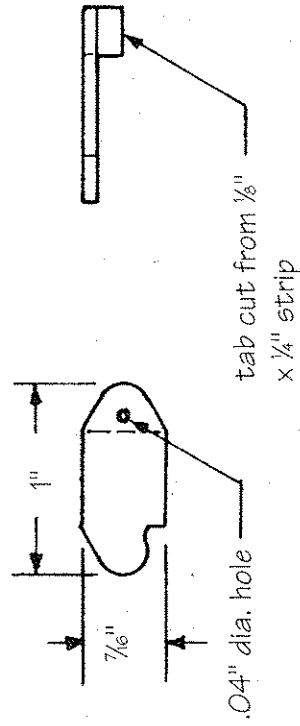


journal
cut 8 from pine

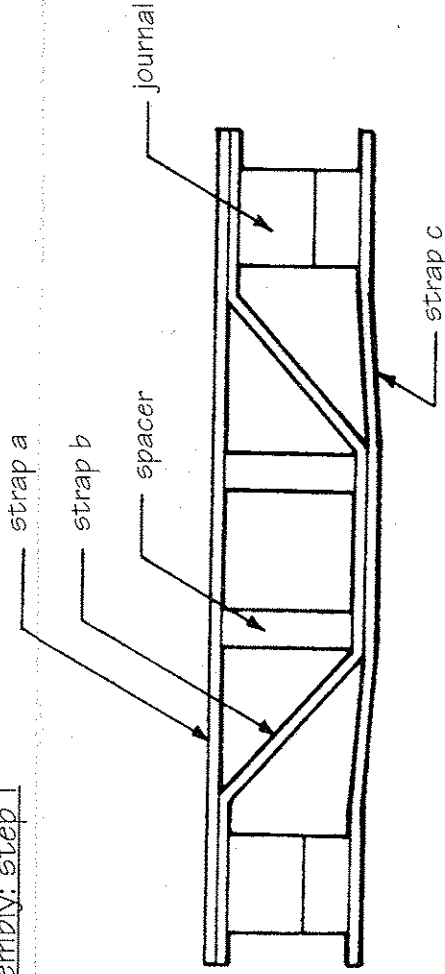


cover

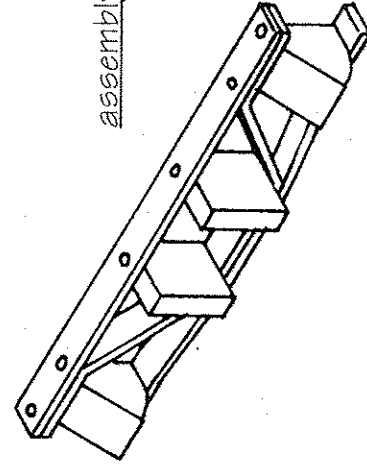
Cut 8 from 1/8" ply.
Glue 1/8" thick tab in place, then sand to final shape.



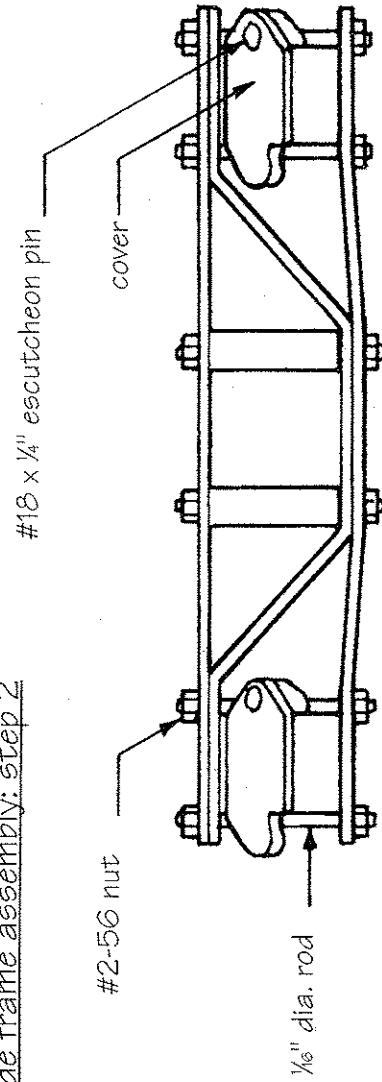
side frame assembly: step 1



assembly detail



side frame assembly: step 2

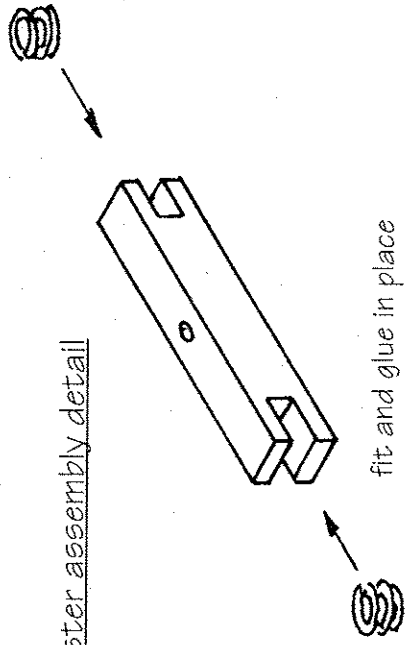


spring

make 4 by wrapping soft wire around a 3/8 inch diameter dowel out to length



bolster assembly detail



final assembly

Prepaint side frames and bolster. Fit eyelet bearings in place. Fit the bolster into one side frame. Slip a #4 washer on each axle end and fit the wheels in place. Slip the second side frame in place.

