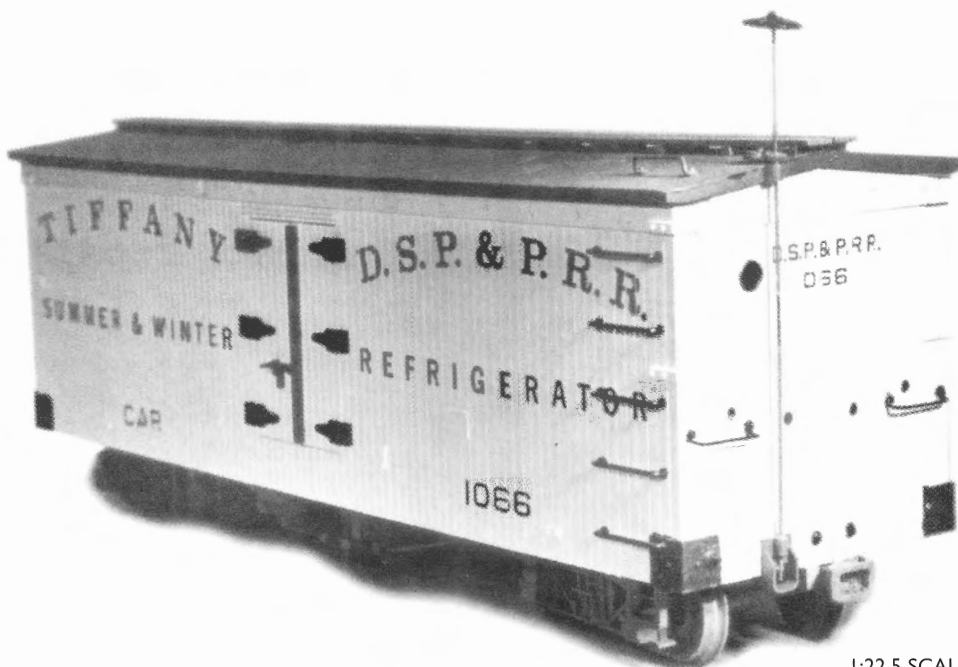


REBUILD A TIFFANY REEFER

COOL

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PHOTOS AND ILLUSTRATIONS
BY THE AUTHOR



1:22.5 SCALE

THE TIFFANY REEFER probably represents the first ever narrow gauge refrigerator car design. LGB painted one of its reefers with Tiffany graphics. Its white sides and black lettering make it something of an eye-catcher. But LGB (and USA Trains) reefers represent 1930 rather than 1880 era cars. I determined to put such a car through the shops and backdate it as much as possible. For modeling information, I relied on Derrell Poole's excellent article in the April/May 1995 issue of *Outdoor Railroader*.

Steel roofs had yet to make an appearance in the 1880s and, according to Derrell Poole and others, early Tiffany reefers lacked ice hatches. They also had link-and-pin rather than knuckle couplers and lacked U.S. Safety Appliance Standards hardware. But Tiffany reefers did have automatic Westinghouse airbrakes because the Union Pacific, the eventual owner of the Tiffany fleet, had made them standard on all cars.

One more problem may discourage you. In 1:22.5 scale, LGB and USA Trains reefers are about half an inch too tall and, in other scales, their dimensions are even less correct. It is impossible or impractical to modify them but, if you are still with me, let's carry on!

MODIFICATIONS

Pry the ice hatches and roofwalks from the top of the car. Use a Dremel motor tool with a tapered cutter to grind off all the

"steel" roof battens. Be sure the entire length of the roof is flat and smooth, then cement on a new roof of $\frac{1}{32}$ -inch thick sheet styrene with $\frac{1}{8}$ -inch scribing. Be sure the scribed lines run the width rather than the length of the car. Use a liquid cement and work quickly, finishing each piece of roofing with an edge swipe to seal it in place. Finish the edges with sandpaper to match the edge of the original roof.

Cut tapered, wedge-shape, roofwalk supports as well as new roofwalk planking as in the detail view of my drawing. The roofwalk on my model consists of two pieces of $\frac{1}{16}$ -inch thick basswood, each $\frac{3}{8}$ -inch wide. Cut the planks to have a $\frac{3}{16}$ -inch overhang on each end and cement them to the roofwalk supports. The supports should be about $1\frac{1}{8}$ inches apart.

Remove all grab irons from the left edge of both car sides as well as from both ends of the car. Cut the stirrup steps from the left-hand ends, too. Leave only those under the right-hand side ladders. Plug all holes with filler and finish smooth. We will touch up the car rather than repaint it so be careful and work neatly.

Now for the ends: Drill a $\frac{5}{16}$ -inch diameter hole as the end view illustrates. That represents the air intake for the cooling system. Flare the end of some $\frac{5}{16}$ -inch diameter tubing to represent a ferrule or grommet and cement it into each hole. The four smaller ferrules on each end are about $\frac{1}{16}$ -inch in diameter. I found them in the electrical hardware section of a dollhouse shop.

Attach the two grab irons on each end as in the drawing. If you plan to use link-and-pin couplers, fill in the coupler pockets flush with the bottom of the car and add the drawhead beams to the underframe. Install four nut-bolt-washer castings to each end beam.

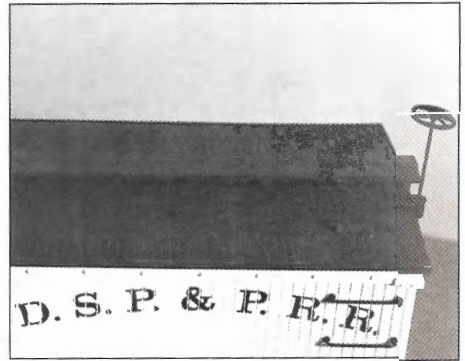
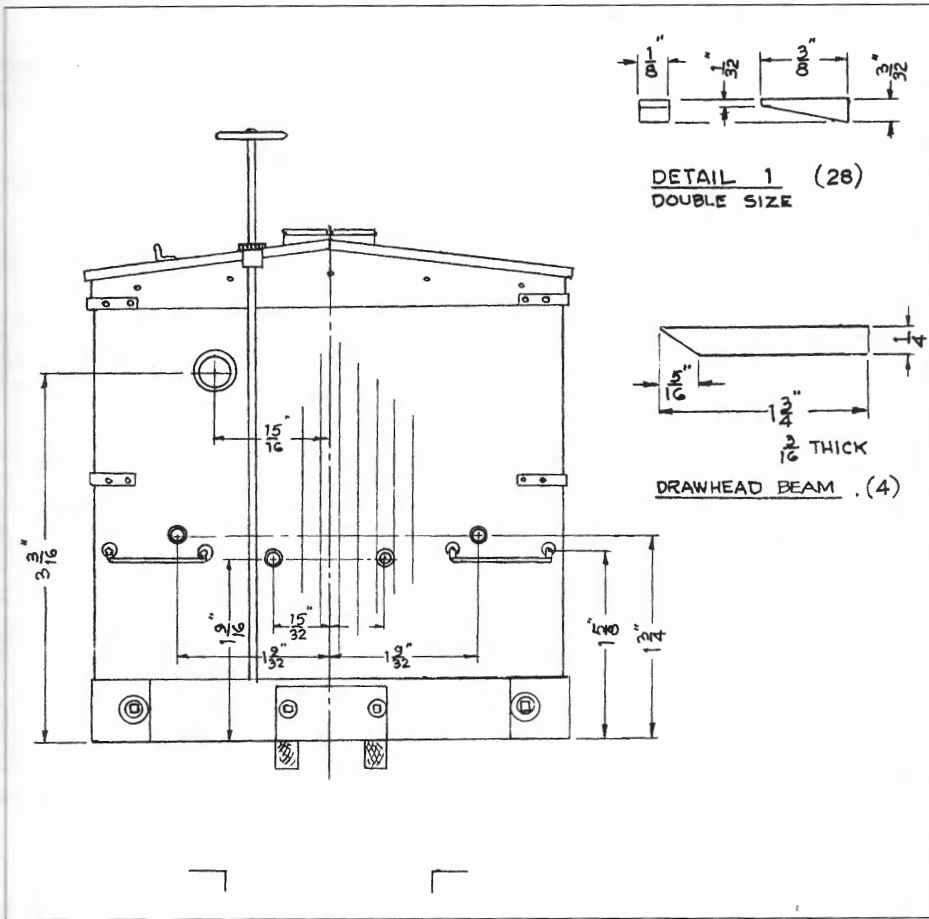
Properly position the ratchet-and-pawl casting on the roof of the brakewheel end of the car and cement it in place. Add the brakestaff and brakewheel. The staff should extend approximately one inch above the roof. Attach a grab iron to the roof at each ladder, half an inch from the end and $\frac{5}{8}$ -inch from the side.

Under the car, truss rods should run from body bolster to body bolster rather than from the crossbearers. (Crossbearers never existed on narrow gauge cars.) I file a matching notch in the bolster and make up new rods from .052-inch diameter brass rod. Remember to place a turnbuckle in the center of the truss rod.

FINISH

Paint the underframe and roof with some shade of oxide red or brown. I used Krylon Ruddy Brown Primer. Carefully mask the sides and ends so they remain white!

As a final touch, if you desire, remove the word "CAR" and the LGB part number from each side. Replace them with the proper lettering style to match the words "SUMMER & WINTER". The proper road numbers are 1050 through 1064. Track



One, in Ottawa, Canada, supplies good dry transfer lettering sets for Tiffany reefers. Their catalog number is G-171. While we may use only the one word and the numerals on the sides, the set also includes the end

lettering. We certainly will need that.

Paint all ironwork flat black. I left the roof grab irons on my model the same color as the roof. The trucks should be the same color as the underframe. If you want to use

link-and-pin couplers, Ozark Miniatures set number OM-06 is appropriate and Hartford Products makes an excellent sprung link-and-pin coupler. Just remember your tweezers when it's time to couple those links!

