



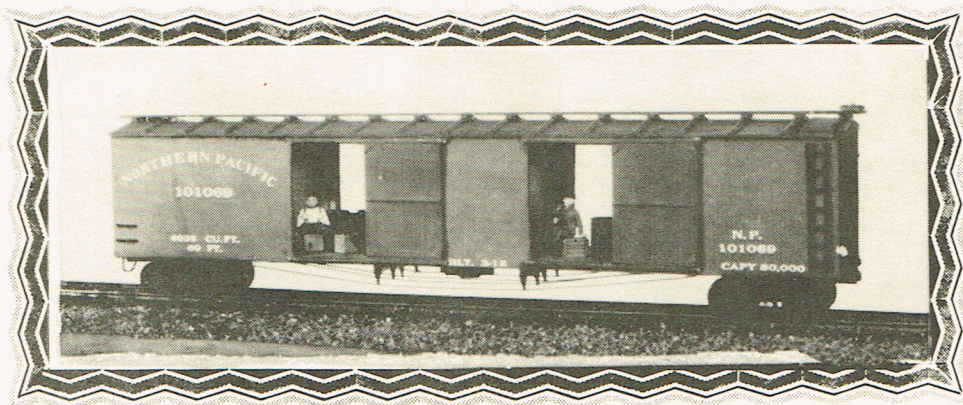
# NORTHERN PACIFIC

## WOOD BOX CAR

*for*

# L.C.L.

# SHIPMENTS



SIXTY FOOT Less than CarLoad BOXCAR

The 1920's found railroads experimenting with primitive "piggy backing," containerization and a host of innovative approaches to the LCL freight business

which trucks were stealing from the rails-- and which had begun becoming "a problem" for the railroads anyhow. Northern Pacific's straight forward approach is represented by this long time Red Ball favorite. Silk screened wood sides and crisp die cast Red Ball details will make this unique kit a standout in your trains. You'll need modeller's files, scale rule, knives, tweezers, needle nose pliers, pin vise, #72 and 1/16 drills, and sandpaper. Paints: clear dope wood sealer, black and Floquil boxcar red; Glues: white, modeller's contact; Arch bar trucks and favorite couplers. File or sand excess metal flash and sprue rib from rear of castings before starting. Wash metal castings in alcohol or warm detergent water to remove skin oil and die release agents which could ruin your paint job later. Caution: castings contain lead. Keep away from small children. Keep hands and work area clean to avoid spoiling prepainted wood surfaces.

PROTOTYPE By NORTHERN PACIFIC  
KIT DESIGN By Merle Rice of  
WABASH VALLEY LINES, INC.







## NORTHERN PACIFIC 60 Foot L.C.L. WOOD BOX CAR

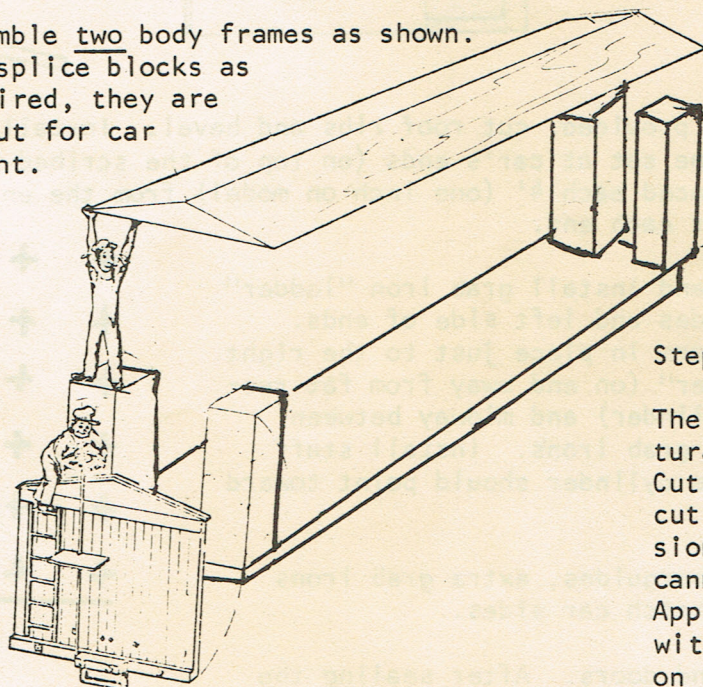


This kit was produced in O Scale exclusively for Paul Piepenbrink, Fort Wayne, Indiana, by Wabash Valley Lines, Inc., Roanoke, Indiana, from the designs and art developed for the Red Ball line of unique prototype kits.

The Northern Pacific railroad attempted to improve Less-Than-Carload Services by construction of sixty-foot, four-door boxcars in the 1920s. Red Ball has carefully duplicated the prototype in 1/4" scale to provide an interesting and unusual car for King Scale modellers' trains.

Please read the instructions carefully before starting.

Step 1. Assemble two body frames as shown. Use splice blocks as required, they are precut for car height.



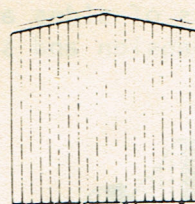
Sand and seal roof using clear dope filler.

USE SPLICE BLOCKS AT EACH SPLICE.

Step 2. Assembly of four car doors:

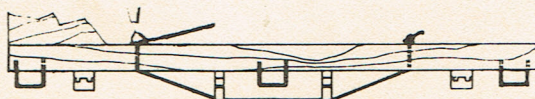
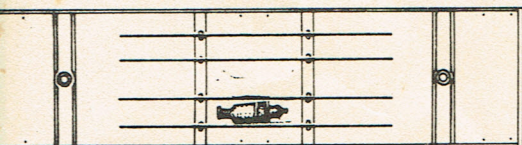
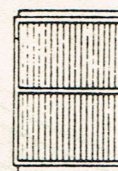
The precut scribed wood and structural members are packaged together. Cut the scale lumber to fit the precut door (since wood changes dimensions with humidity variations, we cannot specify dimensions) as shown. Apply white glue to the scale lumber with toothpick to avoid excess glue on finished surface.

Step 3. Carefully cut two wooden car ends to be flush at roof top and floor bottom. The end must extend 1/16" (1mm) (thickness of painted car siding) beyond sides of end blocks. Glue in place.



WOOD BOX CAR DOOR

Step 4. Turn the body skeleton over and glue the pedestal bar castings and body bolsters in place as indicated. Drill 1/16 pilot holes in floor for truck screws and corner stirrup steps. Install the brake cylinder, centered from end to end.



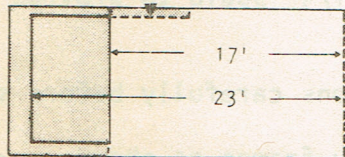
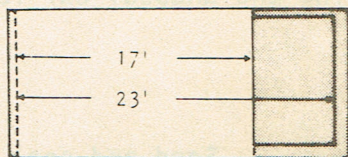
Drill 1/16" holes in line with the queenposts and 3/4 inch toward the center

of the car from the bolster. Cut approximately 1/16 inch from the tips of each toothpick to give them a flat surface. Attach one truss rod at a time by filling



its holes with glue; then jam one end of the line into a hole with a toothpick. Feed the line over the queenposts and hold it tight over the remaining hole. Jam it into the second hole with another toothpick, then trim off the excess truss rod material and snap off the toothpicks. Repeat for the remaining truss-rods. After installing stirrup steps and turnbuckles, paint the underbody black, attach trucks and we'll get on to the car body.

Step 5. Trim the sides to size as shown and check for perfect fit. Do not install.



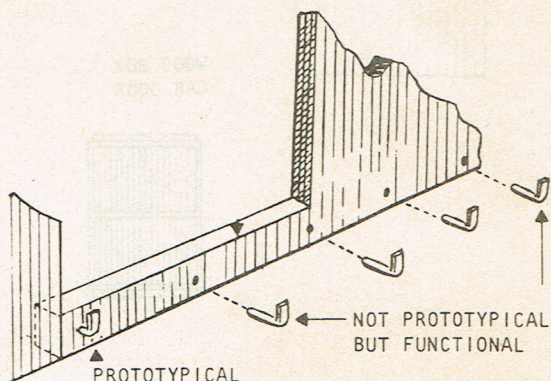
Step 6. Using the scale lumber provided, cut roof ribs and bevel. Install one set at the car's center and one set at car's ends (on top of the scribed end wood). Ribs should then be placed each 4' (one inch on model) from the ends. Add roof walk, extending 1/8" at each end.

Step 7. Using template, drill and install grab iron "ladder" at right ends of carsides and left side of ends. Cement the brake platform in place just to the right of the grab iron "ladder" (on end away from fat reservoir end of brake cylinder) and midway between heights of the top two grab irons. Install staff and brakewheel. (Brake cylinder should point toward brakewheel).



Step 8. Paint car and doors, doorguides, extra grab irons Floquil Boxcar Red to match car sides.

Step 9. Install sides, grabs and doors. After sealing the backsides of sides and doors with clear dope to prevent expansion and shrinkage with humidity variation.



THIS UNIQUE, YET ECONOMICAL KIT  
IN O SCALE WAS BROUGHT TO U BY

Paul Piepenbrink  
8105 Redstone Dr  
Ft Wayne, In46815