

This car was a second-class coach on the Great Northern. It was used as a dormitory smoker car on both the Empire Builder and Oriental Limited. The car contained six Pullman sections and 42 seats.

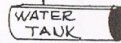
Great Northern number series: #643-667



TOOL & BATTERY BOX
covers can be dressed up with hinges made of card board and pins. (Or use our C890 hinges). Scribe door outlines with a sharp point.

Water tank (5/8 dia x 2-1/4")

3/32 flat cement to floor.



9177

**EMPIRE BUILDER
70' COACH-SLEEPER**

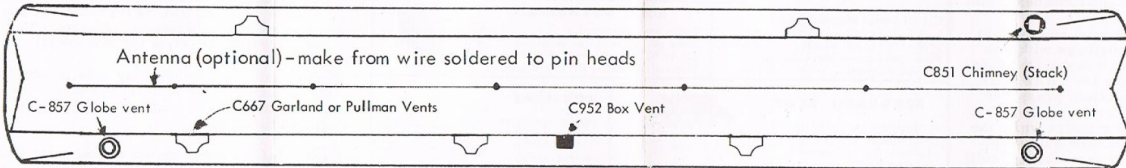
Wm. K. **WALTHERS** INC.

4050 N. 34 ST. MILWAUKEE, WIS. 53216

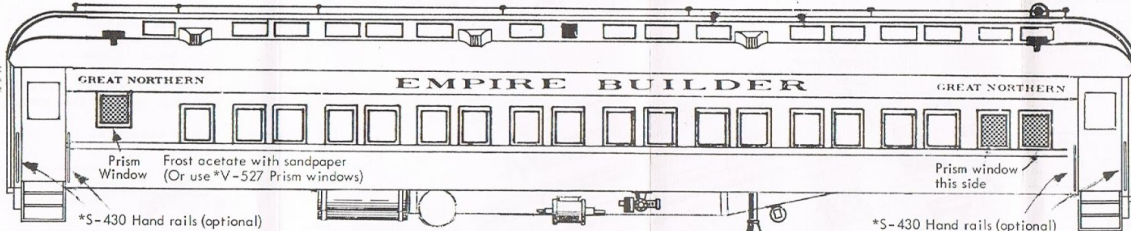
Scale: 1/8" = one foot

70-0105

CLERESTORY WINDOWS
Clerestory windows can be simulated by using *D134-O Clerestory decals

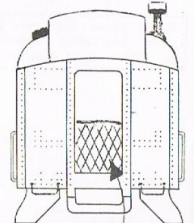


Clerestory windows (optional)



Super-Details

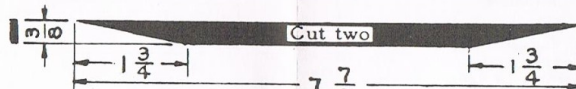
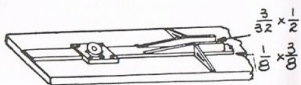
* Indicates (a) Super Detail parts (or) (b) Optional Accessories



*C-293 Tailgate (optional)

Diaphragms

Goo diaphragm bellows to striker plate, then to car end, striker plate out.



Truck Centers shown are average. Verify position with the trucks you intend to use before cutting centersill. (Allow for steps)

Mount couplers on a pad of 3/32" centersill stock. Proper coupler height (center) is

HEY, HERE'S SOMETHING NEW!

One of the really new features of this kit is the method of cementing the sides to the body. BUT, you need a cement that will hold wood to metal: one that will NOT come loose in a damp basement, a cement that will NOT crack even if the model is stored in an attic where the temperature may change rapidly from sub-zero to plus 120°. **GOO WILL DO THIS JOB.**



We have tested Goo continuously since 1949 and we KNOW it will do this job (and most any other cementing job). Don't take a chance with an ordinary cement. Your models deserve Goo. Try it. Give Goo a chance to show you some new tricks.

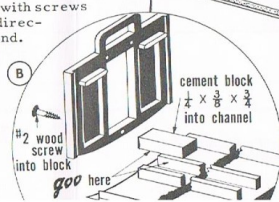
FOLLOW DIRECTIONS. It is important and to your advantage to coat both surfaces with Goo and let dry for 2-3 minutes as it says on the tube. Or, if you prefer, you may use the **TRANSFER METHOD.** Coat one part with Goo, press into place and remove. Goo has now "transferred" to the other surface. **WAIT 2-3 minutes** while the excess solvent evaporates and tack builds up, then press into place for final assembly. You'll be amazed at the difference this simple procedure makes in the speed with which your joints set and the ease with which your models Goo together.

Sides, floor, and roof are all cut to exact size. You do not have to trim them. Roof is 1/2" longer than sides and floor.

Fasten ends to roof and floor with #2 x 1/2" Flat Head Wood Screws. (See inset "B")

ASSEMBLY OUTLINE

- A** Clean flash from end castings. Fasten optional super detail parts to ends if desired. (See note on "Super Details".)
- B** Fasten ends to floor and roof with screws and Goo (inset "B"). Follow directions on Goo tube for quickest bond.
- C** Notch floor to provide clearance for vestibule door and step (see inset "C").
- D** Locate truck centers for the trucks you will use and Goo the diecast body bolsters in place. Cut centersill parts from wood and assemble on

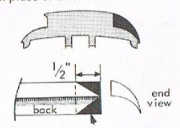


Make tank straps from flat wire or 1/16" strips of wood.

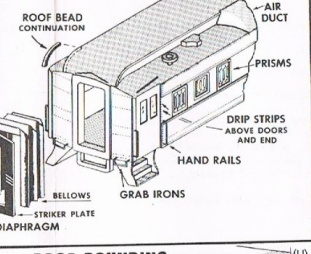
Mount trucks with #4 x 3/4"

SUPER DETAILS To keep basic kit cost low, we packed super detail parts (marked * or "optional") in a separate kit. Included are: hand rails, grab irons, prism windows, guard chain, tailgates, box cover detail, roof bead castings. Also available are accessories such as interior lights, markers, air conditioners to make your car a real show piece. Consult catalog.

AIR DUCT Used on roof of air conditioned car in place of individual vents.



END DETAIL

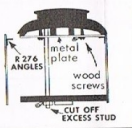


ROOF ROUNDING Cut off shaded area (both ends) CAREFUL not to break feather edge. Shape front or top surface, sand smooth. Fit to roof (remove roof beading). See end illustration for finished view.

Shape lower monitor (L) Make curved bead from stripwood (or use *C579 cast bead). Fit to roof. Shape upper monitor (U) to match bead.

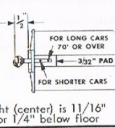
REMOVABLE ROOF

A removable roof is desirable when interiors or lighting are planned. *U750 removable roof kit makes this easy, provides electrical connection to trucks. *R276 metal angles (cemented or soldered) will reinforce sides.

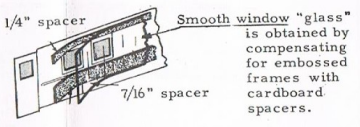


COUPLERS

Mount couplers on 3/32" rod with #2 x 3/8 screw. For short radius curves, increase 1/2" dimension. Proper height (center) is 11/16" above rail or 1/4" below floor.



E Complete the underbody details with both standard and optional superdetail parts, scaling any needed dimensions from the plan.



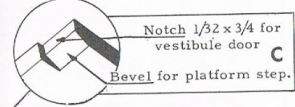
F Prepare sides. If the optional hand rails are desired, drill holes and cement or solder in place. Check sides against body for fit and then paint. Do not paint the edges that will be Gooed to the roof and floor. When dry, Goo cardboard window spacers to inside of car side, then Goo transparent window material to the spacers. (Spacers not required on cars with streamlined-style flat windows.)

G Prepare roof, installing details with Goo as shown on the plans and rounding the ends with file and sandpaper to contour shown in the drawings.

H Paint the body, except do not paint the edges of the floor and roof where the sides will be cemented in place.

I Fasten sides to body with Goo as follows: Coat the edge of the floor and roof with Goo and press the sides in place. Remove the sides and allow the Goo, which is now on the sides as well as the floor and roof, to dry for two minutes. Then press the sides firmly in place. The joint will set very quickly this way.

J Mount trucks and couplers.



Mount couplers with #2 x 3/8 round head wood screws. Three #2 x 1/2 FHWS will be covered by Diaphragm.

IMPORTANT: These General Instructions show the body assembly of any car of this type. Car plans on the reverse will show where to locate all detail parts.

