

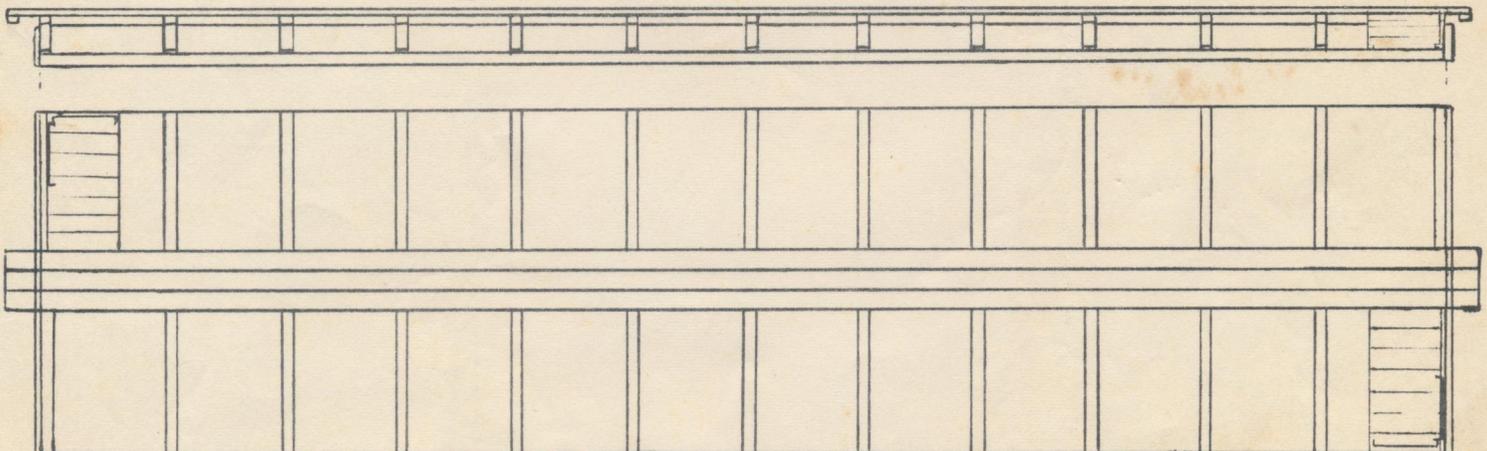
SUNSHINE MODELS

BUNK CAR

All wood parts should be sanded lightly with very fine sandpaper before assembly. This is important as even smooth looking wood often shows up badly after painting. The major parts of the kit are precut. For easier identification the stripwood has been color coded on the ends. The roof, ends, and four side pieces are built up and painted as separate assemblies before gluing together. Painting is as varied as the number of roads that used these cars. A thin weathered wash of box car red will look good, but many other schemes are used such as gray with brown roof and underbody. Trucks should be painted either rust or the same color of the car, rather than flat black.

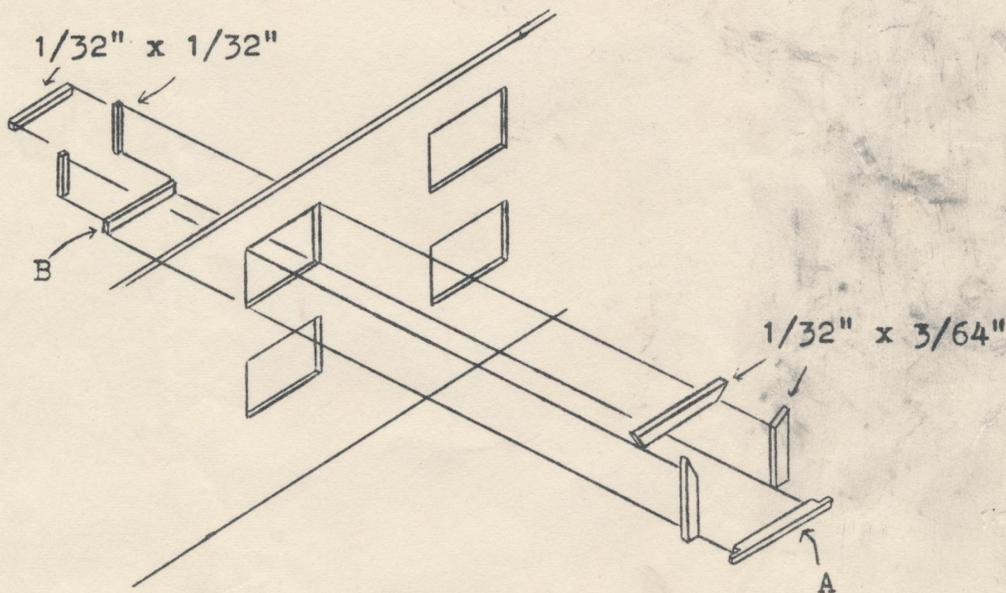
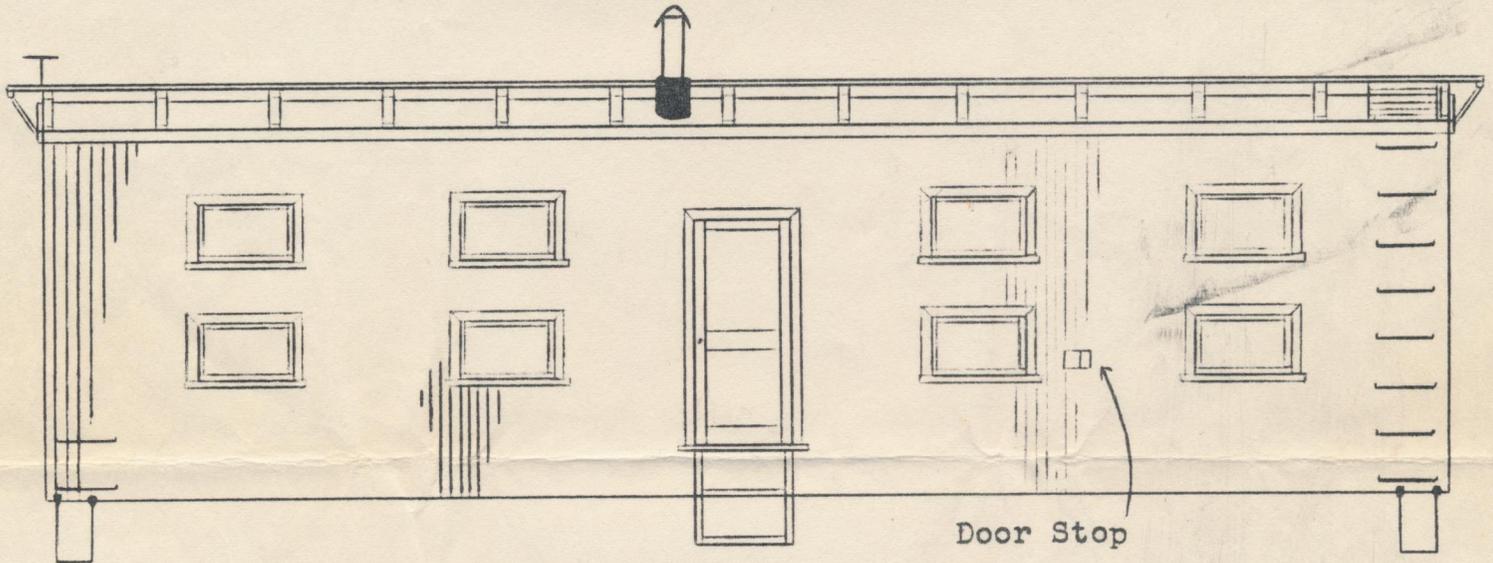
I. ROOF

To begin cut 13 $1/32$ x $1/16$ roof ribs $1\ 7/8$ inches long. Preferably using a small square, mark where the ribs will go on the roof. Partially cut through the center of each rib so it can be bent over the peak of the roof. Glue them in place and then sand the ends flush with the edge of the roof. Now sand the peak of each rib so that there is a flat section of $5/16$ " for the roof walk to be fastened. Lay the precut roof walk up side down on the roof with an equal amount overhanging each end and hold tightly in place with rubber bands. Cut 15 $1/32$ x $1/16$ x $5/16$ " pieces and glue on the roof walk at the 13 places where the roof ribs will touch plus one flush with each end. Remove the bands and paint the roof walk and the roof except at the points on the ribs where the glue will be applied. It is far easier now than after the walk is glued in place. Paint the underside of the two lateral roof walks. Glue the roof walk in place and then the lateral walks using a $1/32$ x $1/32$ x $3/4$ " piece to support the side. Also, install the two grab irons on each lateral walk and the smokejacks. The smokejacks should be shortened $1/4$ " by removing a portion from the center and then epoxied together, making the height above the car roof $5/8$ ". Touch up these details with paint and the roof assembly is completed.



II. Sides--Bunk Car

The four sides are precut needing only window framing and trimming for the doors. The window sills (A) are installed first using $1/32''$ x $1/16''$ strips. Notches must be cut in the corners so that the sill fits into the window opening. Another $1/32''$ x $1/16''$ x $1/2''$ piece (B) fits on edge against the sill from the inside. The rest of the window is made from $1/32''$ x $1/32''$ strip-wood. Corners are not cut at 45° . The window frame is made from $1/32''$ x $3/64''$ pieces with corners at 45° here. Put the vertical pieces on first and then the top. Now paint the window frames and then the sides. Also, paint the back of the sides a dark color to hide the lack of detail inside. Finally glue the window material to the back of the sides. Do not use a white glue for this.

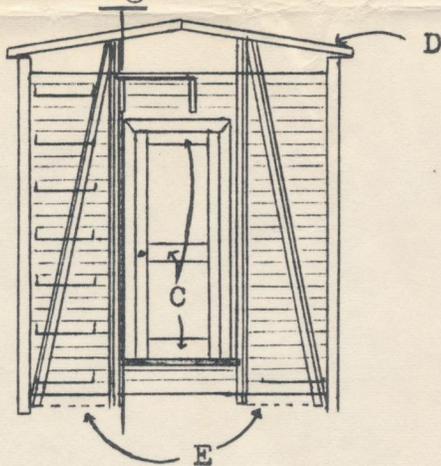


III. ENDS

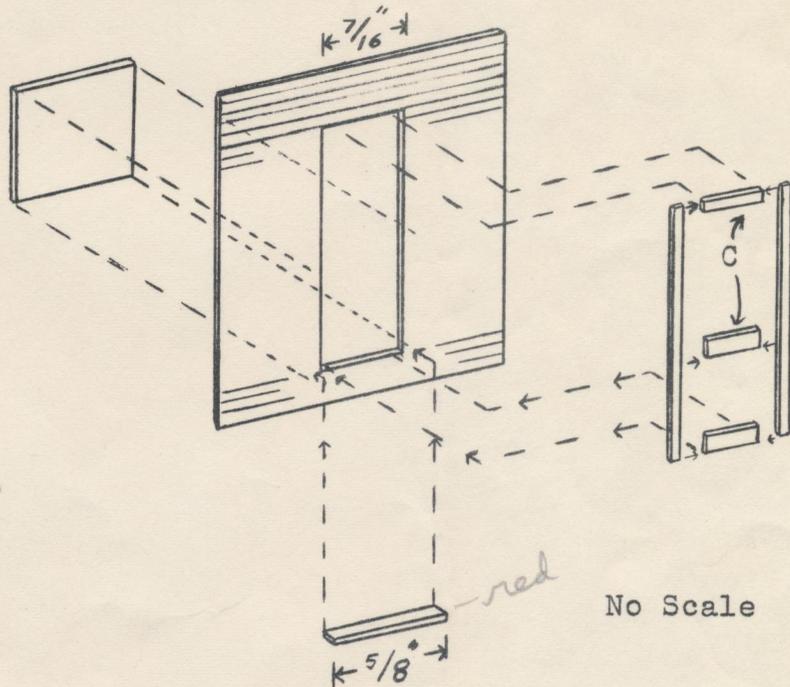
With a sharp knife cut the door openings in each of the two ends. These are $7/16"$ x $1\ 3/16"$ high, leaving $5/16"$ above the door and $3/16"$ below. The doors are built up as follows. Two $1/32"$ x $1/16"$ x $1\ 3/16"$ pieces are glued to the door openings flush with the inside edge of the ends. The cross pieces (C) are mounted in between these with the top one being $1/32"$ x $1/16"$ material and the lower two $1/32"$ x $3/32"$. The bottom door panel is made from the backside of a piece of scrap siding. A $1/32"$ x $3/32"$ x $5/8"$ door platform is located even with the bottom of the door. Make the door frame out of $1/32"$ x $1/16"$ material. Paint the doors and ends including the back sides and install the window material.

IV. Body Assembly

Paint the least smooth side of the floor a dark color. This will be the side that goes up into the car. The eight sub-assemblies are now ready to be glued together. First glue the ends to the floor so that they do not extend below the bottom edge of the floor. Cut four $1/4"$ x $3/8"$ x $1\ 9/16"$ corner posts and glue flat on the ends and flush with the corners. Glue the roof on top of the corner posts and ends making sure that all corners are square. Using the pictures note the placement of the four side assemblies. Trim all four pieces equally so that there will be an opening of $1/2"$ for the side doors to be fitted. Always trim from the edges closest to the door. Glue the sides in at this time.

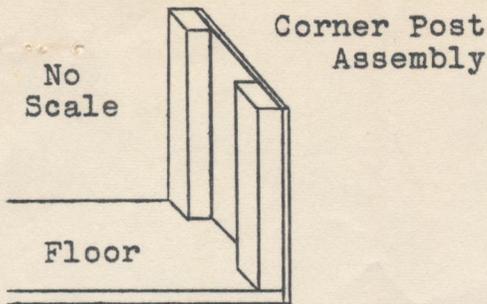


Note: Zee bracing, brake platform and staff, parts D & E, and grab irons will be added later.



Color Code

$1/32"$ x $1/32"$	Green
$1/32"$ x $3/64"$	Blue
$1/32"$ x $1/16"$	Plain
$1/32"$ x $3/32"$	Red
$1/32"$ x $1/8"$	Gray
$1/32"$ x $3/16"$	Brown
$1/16"$ x $1/8"$	Black



V. SIDE DOORS

Using the scrap siding supplied fill in the top and bottom of the opening so that it comes down $7/16$ " and up $1/4$ ", leaving a $1/2$ " x $1\ 3/16$ " door opening. Since the car is enclosed now there is no easy way to apply the window material to the inside, therefore we must build the

door seperately and set in the opening after. The doors are the same as on the ends including the platform, except that everything is $1/16$ " wider here. Build the door using two sides, three cross-pieces, a door panel for the bottom, and window material. Do not let the door panel cover the $3/32$ " bottom crosspiece more than $1/32$ ". Cut two $1/32$ " x $1/16$ " x 1" pieces, and using a tweezers glue to the inside of the car sides across the opening for the door to be glued to. Put one at the top of the opening so that it will be above the window, and the other at the bottom so it will clear the door panel. Paint the door and then glue in place. Now apply the $1/32$ " x $1/16$ " door trim and paint.

VI. UNDERBODY

Mount the center sill and bolsters as shown on the plans. *Plans* For AF trucks the center sill must be cut shorter and the bolsters are left off. The outer crosspieces are $1/32$ " x $1/16$ " while the inner are triangles cut from $1/32$ " x $3/16$ " stripwood capped by $1/32$ " x $1/8$ " wood. Install the coupler pockets and couplers of your choice. The four parts E are $1/16$ " x $1/8$ " strips. Study the drawing for position of brake rigging. The K brake cylinder is mounted on the $3/16$ " x $1/4$ " x $3/4$ " block. The main air line is made of .032 wire, while the pull rods are .025. It is far easier if you make the air line in four pieces, as it does not have to go all the way through the bolsters or center sill. The levers are made of $1/32$ " x $1/16$ " strips. A small chain is furnished in the kit.

VII. DETAILS

- 1) Mount the $1/32$ " x $1/16$ " strips to the end of the roof (D).
- 2) Add the Z bracing to the ends. It is very close to the doors and so should be painted before glueing on.
- 3) Install the 36 grab irons to the sides and ends.
- 4) Add roof walk end supports using .032" wire $5/16$ " long.
- 5) Using the small pins supplied add door knobs to the doors.
- 6) Make door stops from scrap wood which would be left from the days that this car was still a box car.
- 7) Add end sill steps.
- 8) Side door steps are made using $1/32$ " x $1/16$ " x $1/2$ " strips for the sides. The lower step is $1/32$ " x $1/8$ " while the upper step is $1/32$ " x $3/32$ ".
- 9) Add brake platform, staff, and brake wheel.
- 10) Paint final details and add trucks of your choice. Andrews are best for this car.

