





Glue the sub ends to the floor, be sure the rabbet in the floor is up as shown. Glue the sub roof on top of the sub ends. Glue the roof center support to the sub roof; make sure that it is centered on the sub roof.

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- 2 Glue the scribed ends on to the sub ends; be sure that the bottom of the scribed ends are 3/32" above the bottom of the floor which line up with the rabbet in the floor. See the cross section alongside. Note that the ends overhang an equal amount on each side.
- Glue on the roof half overlays. The roof halves should overhang the sub roof by 3/16" on each side, and each end by 1/16". Cut 4 pieces of 1/32" x 1/8" strip wood to make the end fascia; note that the end fascia will extend beyond the scribed ends by 3/64" on each side. Refer to the full size plan sheet. Glue the end fascia in place.
- Position 17-roofwalk saddles on roof using 5/8" centers, and glue in place. Glue 3, 1/32" x 1/8" roofwalk boards to the roofwalk saddles as shown, with 3/16" overhang at each end of the roof. Trim two brass brake platforms to make roof walk end supports. Glue them in place on the bottom of the roof walk and glue and pin to the ends. Refer to the full size plan for positioning.

Remove shaded areas from two brass brake platforms to make the roofwalk end supports.



- $\,$ Glue and pin the brass brake platform to the brake wheel end of the car. See the full size plan. Glue the $1/32"\times 1/4"\times 5/8"$ scribed wood overlay to the top of the brake platform.
- 6 Glue the four ice hatches to the roof. Bend up two roof corner grab irons as shown below. Refer to the full size plan for positioning of the ice hatches and grab iron holes which are made with a # 76 drill.

All bends are 90°.



- 7 Fit the crossbearers and bolsters to the center sill. Line up the noticnes in crossbearers and bolsters match travel of brake pipe, see full size plan on other side for detail. Notch the center sill for the cross over of the brake pipe. Bend brake pipe as shown, to fit the notches in the center sill, crossbearers, and the bolsters, and glue in place. Glue center sill assembly to the floor. Glue the brake cylinder to the floor pointing toward the brake wheel end of car, glue brake levers on center sill, cut and bend "028" dia, wire for brake rods and glue to brake levers and bolsters. Note: the brake rod from the brake well gear has a 1" chain on the brake cylinder end. Drill #76 holes for brake lever hangers (staples) and press in place over the brake levers. See full size plan on other side for length and positioning.
- 8 Drill four holes with a #76 drill in each end sill, marked by the four dimples, for the end sill grab irons. Glue the end sills to the car body with an equal amount of overhang on each side. The end sill with brake housing on it goes on the brake wheel end. Cut off excess length on the right and left portions of the side sills so that the step of the center side sill is centered in the middle of the car. After a proper fit has been obtained, glue the side sills to the floor. The top of the side sills should be even with the bottom of the rabbet, 3/32" above the bottom of the floor. Press the grab irons (staples) into the holes in the end sill.
- Cut .028" wire to length for brake staff, (see full size plan for proper length). Epoxy the brake wheel to the brake staff. Carefully drill (#76 drill) a hole through the brake platform overlay, and run the brake staff through, down to the brake stirup and glue.
- Paint the body assembly the appropriate color, as stated on the paint slip. Paint the underframe assembly, from the top of the side sill and end sill down, black.
- 11 Test fit the car sides to the body. Paint the bottom edge of sides to match the sides, paint the ends of the sides to match the ends of the car body. Glue the sides to the car body.
- Carefully drill (#76drill) sides and ends for grab irons (staples) and press grab irons into the car. Form the 12 corner straps from brass strips by bending them 90° in the center. Prepaint the corner straps, side fascio, drip strip, door latches, and hinges, the appropriate colors; listed on the painting instruction sheet, and glue to the car; use the full size plan on the other side for location. Cut the ladders to the proper length, notch the ladders for the corner straps, use the full size plan for length and notching. Paint the ladders according to the painting instruction sheet. Glue the ladders to the car, use the full size plan for locations.
- 13 Touch up all painted surfaces as needed. Spray on an protective clear overcoat such as HOBSCO DDV[®] over the entire car.
- 14 Cut off excess coupler shank length to fit. Paint the couplers if desired, fasten to car with #1 x 3/8" round head wood screw.
- 15 Mount trucks with #3 x 5/8" round head wood screws.

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