

3/16" SCALE  
50' OUTSIDE BRACED BOXCAR

INSTRUCTION BOOKLET



!#@\*?! TRAIN STUFF

175 MONMOUTH BLVD.  
OCEANPORT, N.J.  
07757

## INTRODUCTION

### #24902 Bangor and Aroostook

This Kit was designed from the Berwick Forge and Fabricators, Co. (division of Whittacker) 50' outside braced, plug door box car. It was made for the Bangor and Aroostook Railroad which is headquartered in Maine. These cars were built in 1972 and carry an AAR plate "c" clearance..The door sign 0 signifies lading strap anchors. The inside car length is 50' 6" ; the inside car height is 10' 11 7/16"; nominal weight 67,700 pounds; width clear door opening 10'.

### Cover

This car was on a siding along the New York and Long Branch Line ( division of Conrail) in Asbury Park, New Jersey.

## #24902 BANGOR AND AROOSTOCK

50' Outside brace box car kit

Unpack and inspect kit against the parts list. If anything is missing or damaged, contact us now for replacement. Read the instructions thoroughly and familiarize yourself with the parts and sequence of assembly. For a smooth metal like finish, use two coats of sander sealer on the roof and stripwoods... Sand with 00 steel wool or fine sandpaper after each coat.

### Roof Detail

Using the 1/32" x 1/32" (blue) stripwood, cut and cement two pieces to form the overhang for the ends of the roof. Measure and cut 14 roof braces from the 1/16" tee section (refer to picture on center page). Cement braces on one side of roof, wait till dry then score the center of brace with a blade. Glue, bend, and hold with paper clips.. Ends of roof braces can now be trimmed and rounded. Cement the Murphy diagonal roof sections in palce. You can refer to the picture on the center page. The roof can be painted now.

### Side Detail

Drill holes in notched corners for sill steps using 1/32" drill bit, leave room for the 1/32" x 1/32" (blue) end brace. The sill

Steps can either be soldered or epoxyed on. Clean steel sides with straight vinegar to remove protective layer. This will allow the paint to adhere to the metal. Now attach the sill steps by pinning or other methods described. Use  $3/32$ " x  $3/64$ " (purple) for top brace, leaving about  $1/8$ " overhang on either side. Cut the 24 outside braces using the  $5/64$ " x  $1/32$ " (green), referring to the picture on the center page. Glue in place. Cut four  $1/32$ " x  $1/32$ " (blue) braces and install on the outside ends. The ladder will be attached to this. The door should fit between the two cast center braces and butting on the top brace. Using the  $1/32$ " x  $1/32$ " (blue) strip, measure and cut the top door guide, cement this in place; trim off the excess of the outside braces, so that they are the same length as the door. Construct the lower door guide using the  $3/64$ " x  $1/32$ " (red) wood. Attach plug door to the side and add detail. Door rods fit into grooves on the door and are bent to fit into door wheels. Door levers can be added when the rods are in place. Using the thin wire, cut rungs for side ladders. The side braces can be scored with a triangular file for ease in placement. Cement these steps in place. Sides can be painted.

## Underframe Detail

### Scale trucks

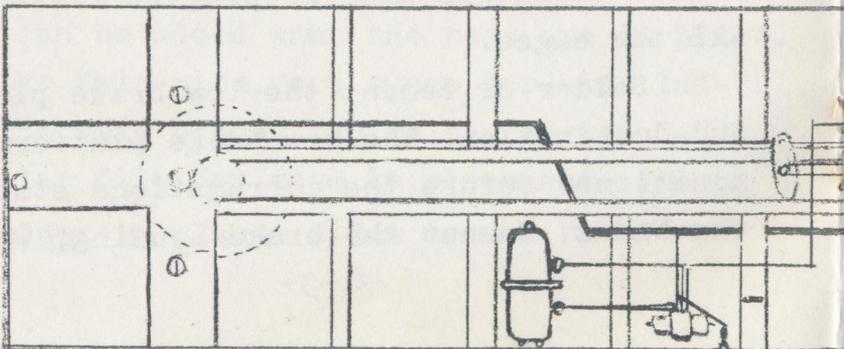
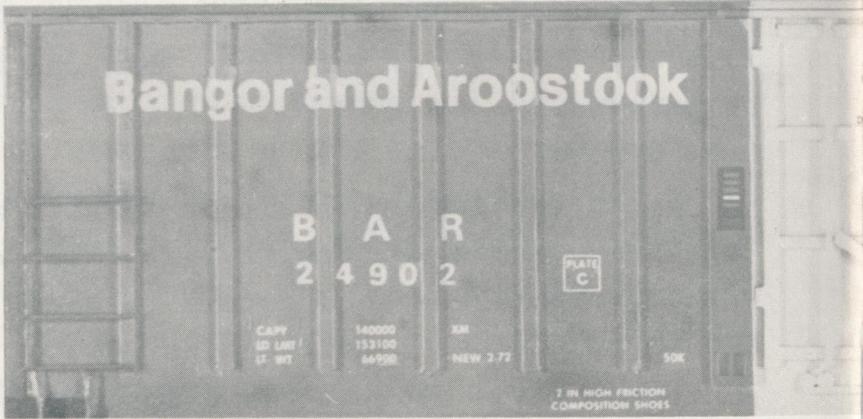
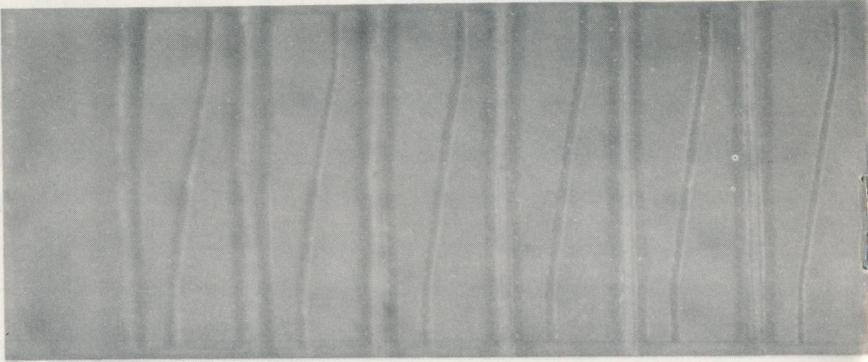
Place the bolster with coupler pocket extending by  $3/32$ ". Measure, cut, and cement the grooved centersill in place. Pre-drilling the center sill holes for the brake piping system before cementing is a good idea. Use  $5/32$ " x  $3/32$ " (yellow) to make the large braces and install. Use  $1/16$ " x  $3/32$ " (orange) to make the 12 small braces and install. Cement the brake system and levers with appropriate piping. The thick wire for main brake line and thin for the others. This can now be painted.

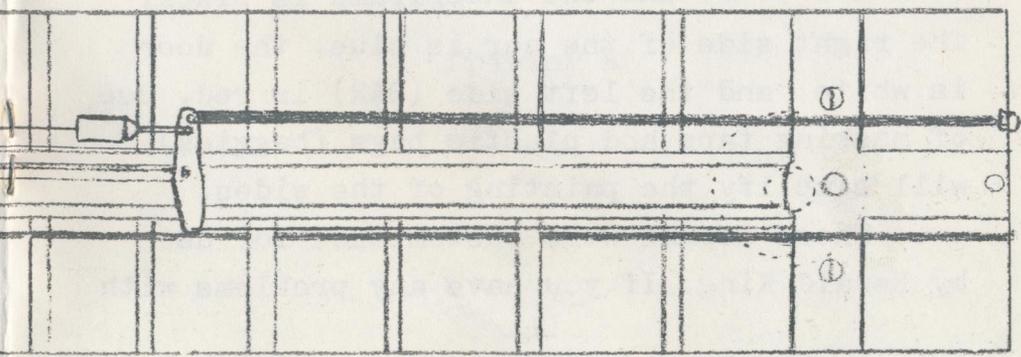
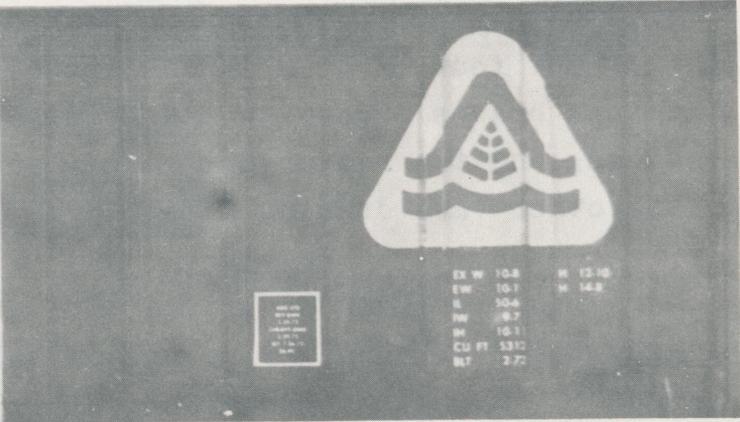
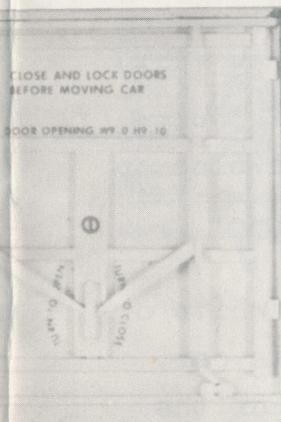
### A.F. Trucks

Use washers provided for bolster and trim away excess centersill that interferes with movement. Use wood screws to mount trucks. Add as much brake detail as desired.

Cement the roof to the endblocks, keeping the undercut of the roof flush with the outside of the endblocks. Cement the floor to the endblocks also keeping it flush with all the edges.

Solder or cement the low brake platform and destination. The low brake platform is positioned before the corrugations start on the brass. Cement the brake housing, wheel





and brake pulley in place. Repeat these steps on both sides omitting the brake housing, wheel and pulley.

The end ladders can be placed now. Cut studs on back of the ladder for level placement. A small piece of wire (thick) can be made into a support for the top cross rung. Paint this now. Cement the corrugated ends on to the endblocks. The edge of the brass should overlap equally. Cement the sides to the underbody frame assembly keeping the outside edge flush with the endblocks.

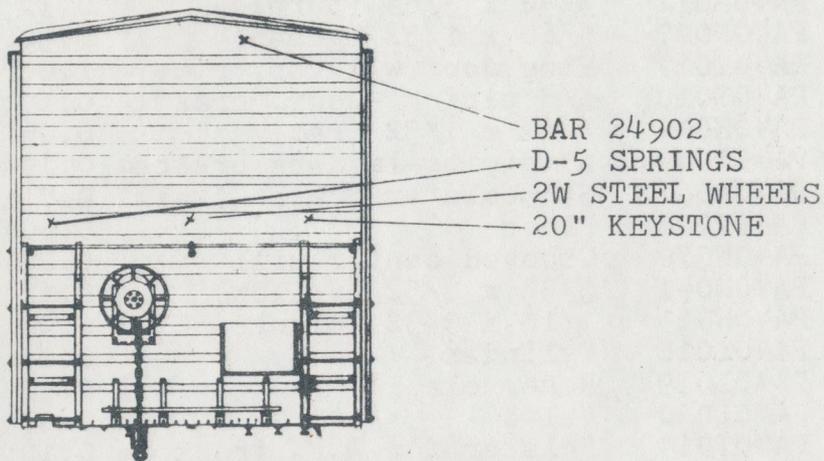
Cut four  $5/64$ " x  $1/32$ " (green) 2" long corner braces. Paint two blue on all four sides; and two red on one corner and blue on the other (see drawing A page 5).

#### Painting

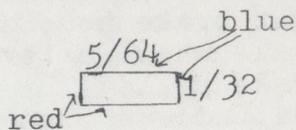
The sides can be primed with a white or gray metal primer. The colors of this car, when it was built, were the colors of the American Flag (insignia red, insignia blue, and appliance white). The roof is red, the ends are blue, and the underframe is black. The right side of the car is blue, the door is white, and the left side (BAR) is red. Use of masking tape and plastic bags (baggies) will simplify the painting of the sides.

These decals were custom made for us by Herald King. If you have any problems with

the decals, we will replace any pieces that you return. For best results in decaling use Crystal Cote (Flouquil) on your model to create a gloss finish. The finished model can be sprayed with dull coat to hide the decal film.



End Decal Placement



Drawing A

## Parts List

#24902 BAR 50" Outside Braced Boxcar

1	PA40T002	Modern style roof	\$ 0.75
2	PA40N001	1/32 x 1/32 (blue)	0.12
3	PA40N129	1/16 Tee strips	0.13
4	PA40S201	End sill steps	0.55
26	PA40D004	Murphy diagonal braces	0.75
2	PA40T016	Sides (BF & F)	1.00
8	PA40T011	Escutcheon pins	0.10
2	PA40N012	3/32 x 3/64 (purple)	0.12
6	PA40N007	5/64 x 1/32 (green)	0.30
2	PA40T017	Plug door w/lever, etc.	1.00
1	PA40T010	5/8 piping -door, brake	0.10
1	PA40N002	3/64 x 1/32 (red)	0.06
2	PA40T009	1" piping-ladders brakes	0.10
2	PA40A062	5 1/2' bolster Scale-Hirail	0.75
1	PA40T006	Floor	0.40
1	PA40N370	Grooved center sill	0.25
1	PA40N041	5/32 x 3/32 (yellow)	0.12
1	PA40N013	1/16 x 3/32 (orange)	0.06
1	PA40L018	Cylinder	0.15
1	PA40L019	Reservoir	0.12
1	PA40L020	Valve	0.08
2	PA40T014	Bolster for A.F. trucks	0.10
4	PA40T012	Bolster screws	0.10
2	PA40T008	End blocks	0.25
2	PA40T004	Corrugated brass ends	0.50
2	PA40L207	Brake platform	0.25
2	PA40T005	Destination board	0.10
1	PA40L116	Ajax brake housing	0.09
1	PA40L115	Brake wheel w/levers	0.15
1	PA40L021	Brake pulley	0.05
4	PA40T015	End Ladders	0.65
2	PA40V005	S-scale converted kadees	1.10
2	PA40A252	Roller bearings w/scale	2.95
2	PA40A253	Roller bearings w/hirail	2.95
2	PA12A051	A.F. knuckle coupler trk.	3.00
2	PA40D002	ACI labels	0.10
1	PA40H001	BAR decals	1.55
1	M24902	Instruction booklet	1.00

Orders under \$10.00 include \$1.00 postage.

insert---the four corner braces should be attached to their respective corners

Other S-Guage Products

RAILBOX a 50' Outside Braced Boxcar Kit, This kit comes complete with basswood roof and strips, steel sides, brass stampings, cast modern doors and brake detail, Photoengravings, decals, ACI labels. Options as type of trucks are also available. Just about everything but the glue and paint.

#24901-0 Kit less trucks and coupler .....\$9.95ppd  
 #24901-2 Kit with Ace roller bearing scale trucks & kadees converted to S.....13.75  
 #24901-3 Kit with Ace roller bearing highrail & kadees.....13.75  
 #24901-4 Kit with A.F. knuckle coupler trucks.....13.75

#23901 Industrial Garbage Can Kit, This kit contains enough material to make five 3' 4" x 2' 7" (S-Scale) industrial Garbage cans. Has highly detailed injection molded can and galvanized steel lids. ....\$1.95ppd

**Bangor and Arcostook**

**B A R**

**5951**

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LT WT	89800	NEW 2-72

