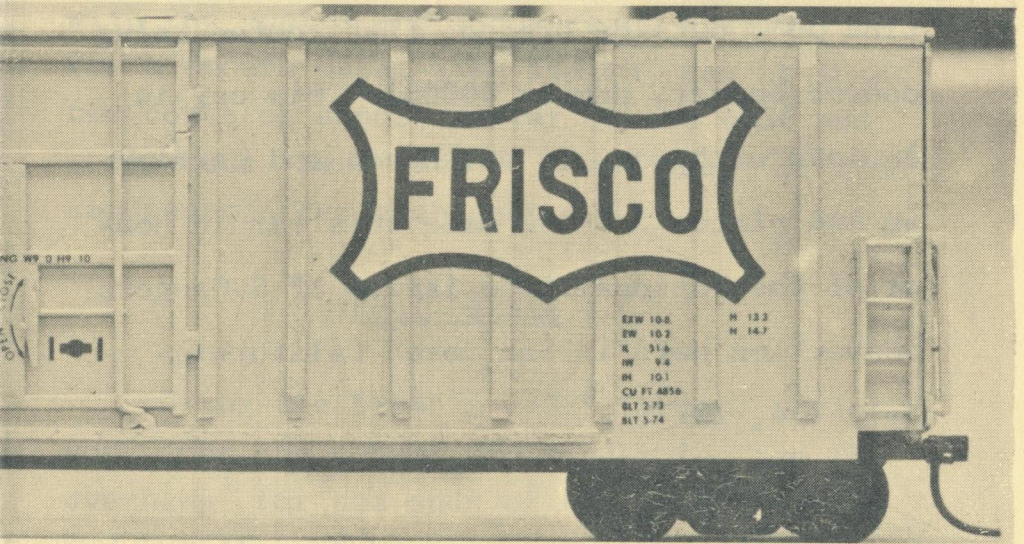


3/16" SCALE  
50' OUTSIDE BRACED BOXCAR

INSTRUCTION BOOKLET



!#@\*?! TRAIN STUFF

175 MONMOUTH BLVD.  
OCEANPORT, N.J.  
07757

## INTRODUCTION

### #24904 Frisco

This kit was designed from the SL-SF Line 50', outside braced, flat roofed, plug doored boxcar, number 600087. This car is equipped with movable bulkheads and carries an AAR plate C. We've made this car in honor of the National Association of S-Gaugers Convention held in San Jose, California- July 1-4, 1977.

## #24904 Frisco

### 50' Outside braced 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 at least 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 5/64" x 1/32" (green) stripwood, cut and cement two pieces to form the overhang<sup>1</sup> for the ends of the roof. Measure and cut 14 roof braces<sup>3</sup> from the 1/16" tee section (refer to picture on center page). Cement braces on roof. Ends of roof braces trimmed and rounded at this time. Cement the Murphy style roof sections<sup>4</sup> in place. You can use the center photo for reference.

#### Side Detail

With the same sized wood, cut and cement

two long pieces to form the overhang for the side of the roof<sup>2</sup>. Bevel the outside edge of the side overhang (drawing A). Cut the 28 outside braces<sup>5</sup> using the 5/64" x 1/32" (green) stripwood. Bevel both ends of the braces, refer to the center page and glue in place. The door<sup>6</sup> fits between the two center braces. Using the 1/32" x 1/32" (blue) strip, measure and cut the top door guide<sup>7</sup>, cement in place. Construct the lower door guides<sup>8</sup> using the 3/64" x 1/32" (red) wood. Door rods<sup>9</sup> made from the 1 5/8" piping are bent to fit into the door wheels<sup>10</sup>. Door levers<sup>11</sup> to be made from the same wire can be added when the rods are in place. Using the cast ladders, attach the side ladders<sup>12</sup>

### Underframe Detail

Scale trucks-

Glue the bolster<sup>14</sup> with the coupler pockets extending by 3/32". Measure, cut, and cement the Grooved center sill<sup>15</sup> in place. Pre-drilling the center sill holes for the brake piping before cementing is a good idea. Use the 5/32" x 3/32" (yellow) strip to make the 12 small braces<sup>17</sup> and install. Cement the brake cylinder<sup>18</sup>, reservoir<sup>19</sup>, and triple

vale<sup>20</sup>, and levers with appropriate piping. The thick wire is for the main brake line<sup>27</sup> and the thin for the others. This can be painted black now.

American Flyer trucks-

Use washers provided for the bolster<sup>22</sup> 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. Cement the floor to the endblocks also keeping it flush with all edges.

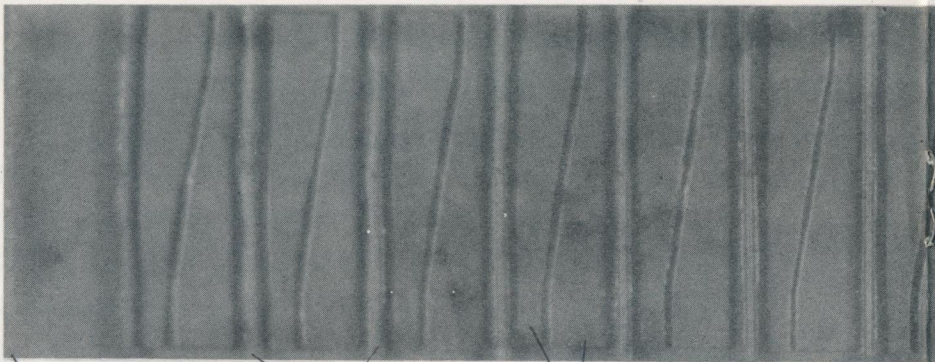
#### End Detail

Cement the low brake platform<sup>23</sup> and destination boards<sup>24</sup> to the cast ends<sup>25</sup> (see end detail drawing). Cement the brake housing,<sup>26</sup> brake wheel,<sup>27</sup> brake pulley,<sup>13</sup> and wheel lever<sup>28</sup> in place.

Now the end ladders<sup>29</sup> can be placed. Trim the studs on the back of the ladder for level placement. A small piece of the thick wire<sup>30</sup> can be made into a support for the top cross rung

#### Final Assembly

Go over this section carefully. Check

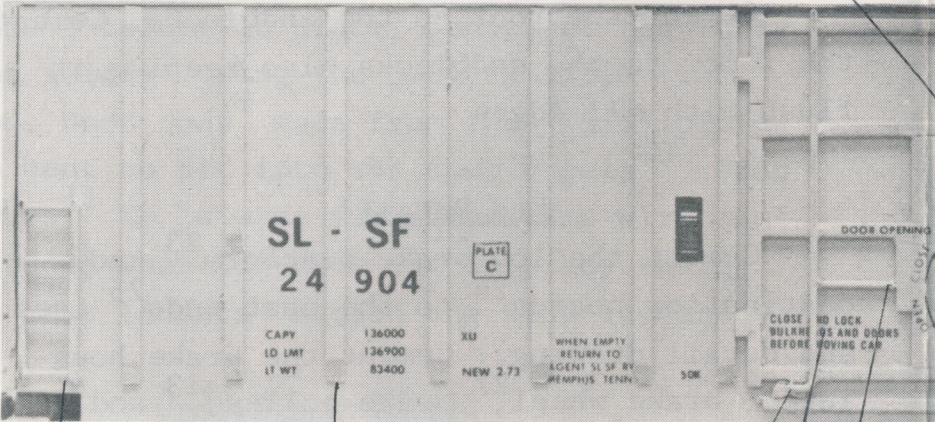


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6



12

14

5

27

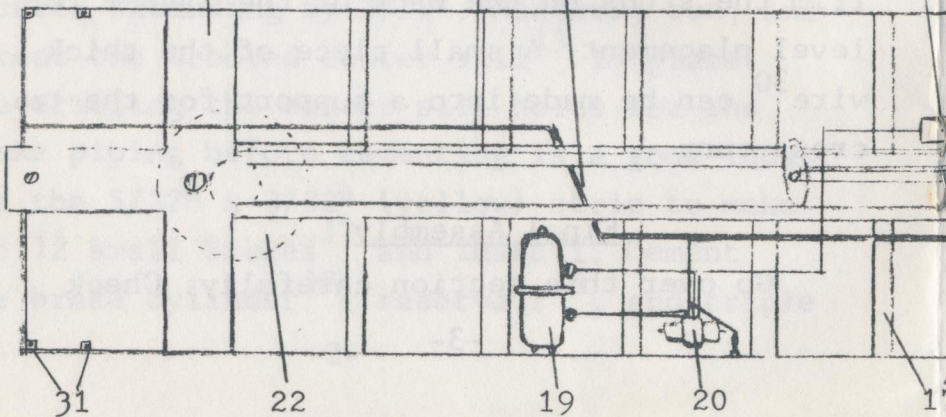
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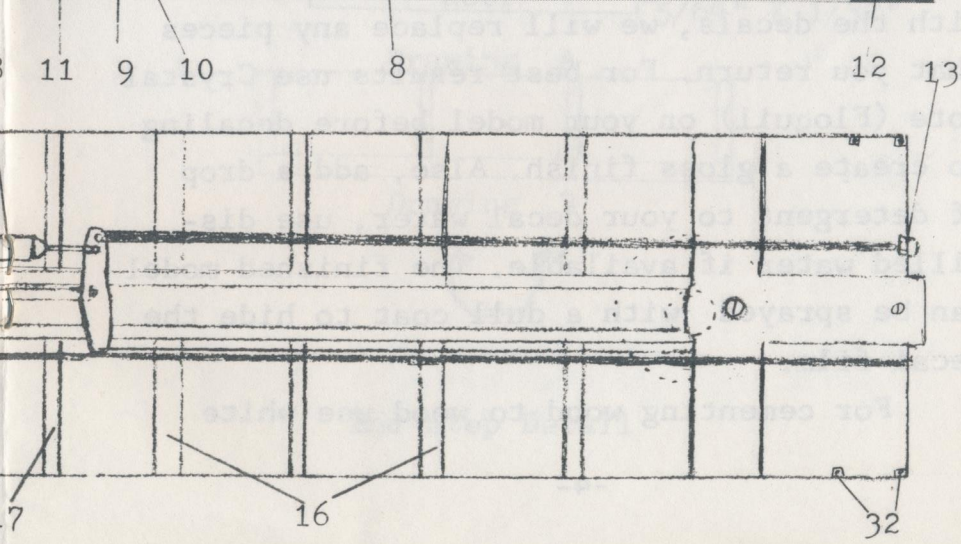
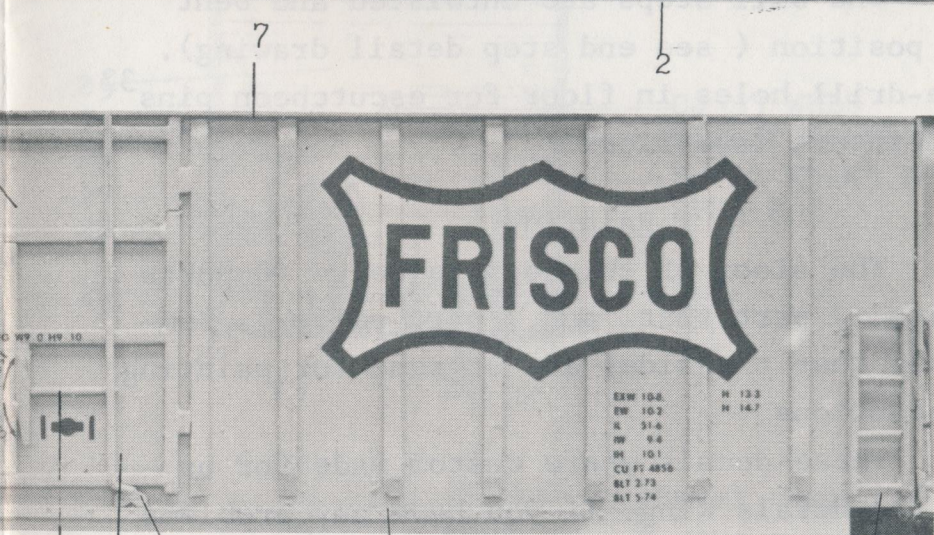
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9

11

18





all fits on joints, especially the sides and cast ends<sup>25</sup> before gluing. Attach four end blocks to the floor making sure they are flush and square (see drawing C). When dry cement the roof to the tops of the endblocks. Glue the sides in place making sure the ends are flush. Now attach the roof assembly.

End sill steps are untwisted and bent to position ( see end step detail drawing). Pre-drill holes in floor for escutcheon pins<sup>32</sup> and insert into floor.

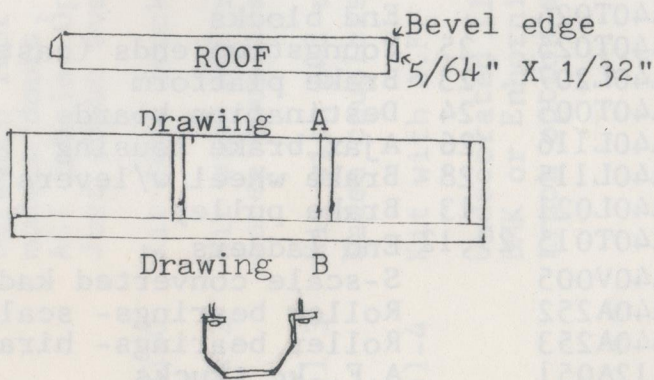
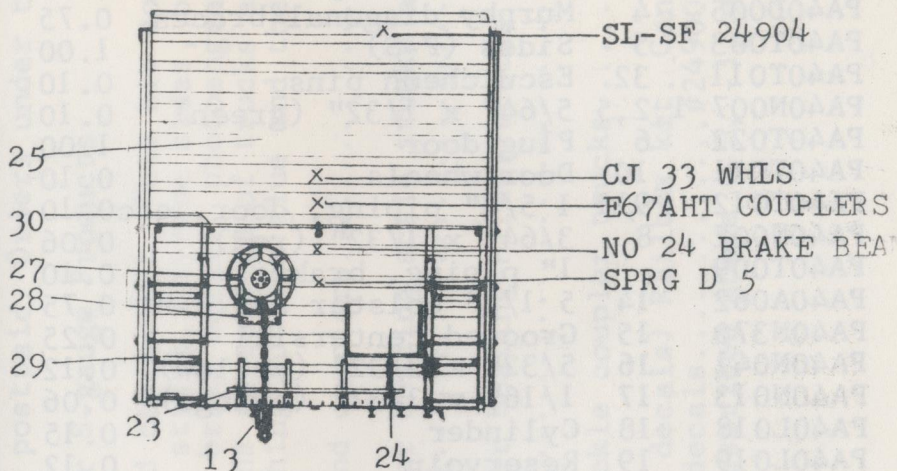
### Painting

The cloor of this car is beige (8 parts white, 1 part rust, and 1 part yellow). Remember that the sides are styrene for painting precautions.

These decals where custom made for us by The Herals King. If you have any problems with the decals, we will replace any pieces that you return. For best results use Crystal Cote (Floquil) on your model before decaling to create a gloss finish. Also, add a drop of detergent to your decal water, use distilled water if available. The finished model can be sprayed with a dull coat to hide the decal film.

For cementing wood to wood use white

glue (Elmer's). For wood to metal or metal to metal you can use contact cement, or epoxy. For wood or metal to styrene sides, use styrene glue, contact cement, or epoxy.



End Step Detail

## PARTS LIST

### #24904 Frisco Outside Braced Boxcar

Qty.	Part #	No.	Description	Price
2	PA40T023	21	Flat style roof/floor	\$0.50
1	PA40N001	7	1/32" x 1/32" (blue)	0.12
3	PA40N129	3	1/16" Tee strips	0.13
4	PA40S201	31	End sill steps	0.55
26	PA40D005	4	Murphy diagonal braces	0.75
2	PA40T003	5	Sides (P-S)	1.00
8	PA40T011	32	Escutcheon pins	0.10
6	PA40N007	1,2,5	5/64" x 1/32" (green)	0.10
7	PA40T022	6	Plug door	1.00
4	PA40T021	10	Door wheels	0.10
1	PA40T012	9,11	1 5/8" piping, door, etc	0.10
1	PA40N002	8	3/64" x 1/32" (red)	0.06
2	PA40T009		1" piping, brakes	0.10
2	PA40A062	14	5 1/2" bolster scale-hi	0.75
1	PA40N370	15	Grooved centersill	0.25
1	PA40N041	16	5/32" x 3/32" (yellow)	0.12
1	PA40N013	17	1/16" x 3/32" (orange)	0.06
1	PA40L018	18	Cylinder	0.15
1	PA40L019	19	Reservoir	0.12
1	PA40L020	20	Valve	0.08
2	PA40T014	22	Bolster/ A.F. trucks	0.10
4	PA40T024		End blocks	0.25
2	PA40T025	25	Youngstown ends (cast)	0.50
2	PA40L207	23	Brake platform	0.25
2	PA40T005	24	Destination board	0.10
1	PA40L116	26	Ajax brake housing	0.09
1	PA40L115	28	Brake wheel w/levers	0.15
1	PA40L021	13	Brake pulley	0.05
8	PA40T015	29,12	End ladders	1.30
2	PA40V005		S-scale converted kadees	1.10
2	PA40A252		Roller bearings- scale	3.25
2	PA40A253		Roller bearings- hirail	3.25
2	PA12A051		A.F. kc trucks	4.00
2	PA40D002		ACI Labels	0.10
1	PA40H003		Frisco decals	1.55
1	M24904		Instruction booklet	1.00

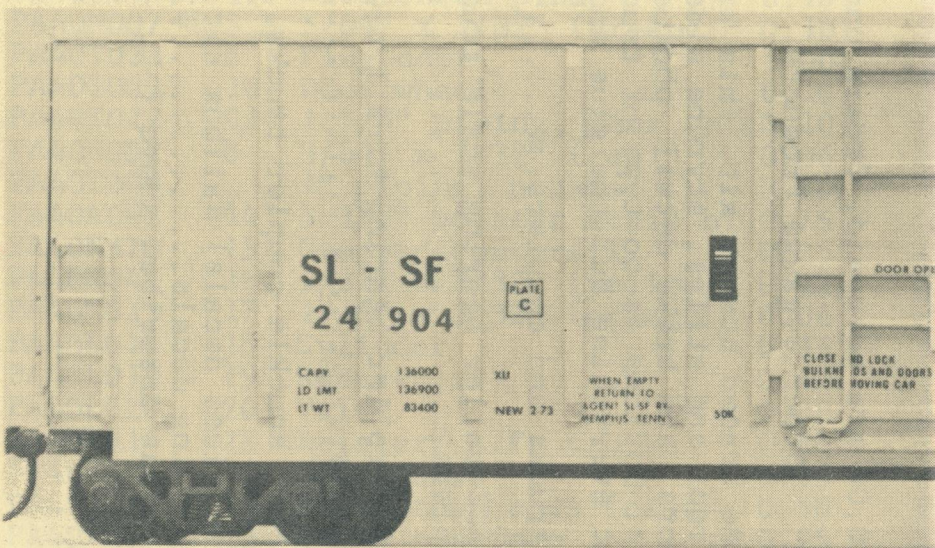
Parts orders over \$10.00 are postpaid. Orders under that remit 10%.

Other S-gauge Products

RAILBOX

50' outside braced boxcar kit. This kit comes complete with basswood roof and strips, styrene sides, brass stampings, cast modern doors, and brake detail, photoengravings, decals, and ACI labels. Options as to type of trucks are also available. Just about everything but the glue and the paint.

#24901-0	Kit less trucks and couplers.....	\$10.50
#24901-2	Kit with ACE roller bearing scale trucks and converted Kadee couplers.....	14.95
#24901-3	Kit with ACE roller bearing hirail trucks and converted Kadee couplers....	14.95
#24901-4	Kit with A.F. knuckle coupler trucks.....	14.95
NEW	Undecorated (less decals) Railbox kit. Can be used with DMK or Enhorning decals.....#24900-0.....	9.75
	truck option as described above (-2, -3, or -4).....	14.25



SL - SF  
24 904

PLATE  
C

CAPV	136000
LD LMT	136900
LT WT	83400

XII  
NEW 273

WHEN EMPTY  
RETURN TO  
AGENT N. 55 84  
MEMPHIS, TENN.

50K

DOOR OPEN  
CLOSE AND LOCK  
BULKHEADS AND DOORS  
BEFORE MOVING CAR