centered on the second panel left of the door. Vertically, the top of the Tack Board should be just below the top door hinge. Small Tack Boards (ee) are placed on each side of the car, near the right edge of the second panel left of the door. The bottom of the Small Tack Board should be just above the bottom door hinge.

(B) Side Grab Irons and Side Ladders

Glue two Side Grab Irons and a Side Ladder (g) in place on each side of the car using locators provided.

#### Step 7. Couplers

Coupler Boxes (zz) may be attached to car by gluing or by use of screws provided. Two sets of Coupler Boxes are included in the kit but only one set is to be used. Those attached to the Underframe sprue must be glued to the car Body. The Coupler Boxes packaged with the Couplers are fitted with holes in the Coupler Box and Coupler Box Cover for screw mounting. Mount Couplers (yy) in Coupler Boxes so that the metal actuating wire points downward when the car is placed on the track.

#### Step 8. Trucks

Remove Sideframes (tt), Bolsters (vv), and Brake Beams (uu) from sprue. They may be trimmed from the sprue, or may be removed by twisting the parts. End of Bolster press fits into opening in sideframe just above the springs with axle pockets facing inward. Flat side of Bolster faces upward. Install Brake Beams in slots in Sideframes just below rounded side of Bolster. After step 9, mount trucks on car Body using the screws provided.

#### Step 9. Glad Hands

Install Glad Hands (11), one at each end of the car, by inserting air line into the lower of the two locator holes just to the right of the coupler box. The upper locator hole accepts the locator on the glad hand. Carefully glue in place.

Step 10. Roof Assembly

- (A) Weighting No weights are provided in the kit. If you wish to weight your model, it should be done at this time. The total weight of the car to meet NMRA Standards should be 3.88 ounces. You must add 2 ounces to your car to reach that weight.
- (B) Glue Roof Assembly in place using a small amount of glue around the edge of the car Body where the Roof attaches.
- (C) Roofwalk Support Brackets (hh) may now be glued in place between the end of the Long Roofwalk and the car Body to complete the assembly of your model.

NOTE: Your car is now ready to put into service on your model railroad empire. We hope that you have enjoyed building this model. We welcome your comments on this kit and also suggestions for future projects. If you find that a part is missing or defective, or if you should break or lose one, please contact your dealer or write to us for a replacement.

Thank you for purchasing an InterMountain Kit!!

#### InterMountain Railway Company

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#### Santa Fe Refrigerator Car Kit

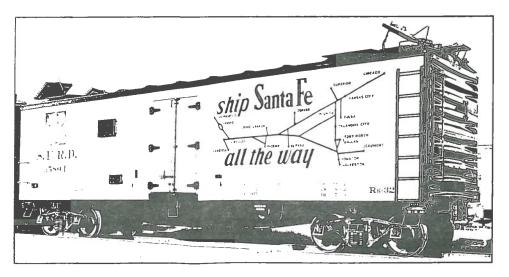
#### GENERAL INSTRUCTIONS

Please read the instructions and study the drawings and parts before beginning assembly of this kit!! Many of the parts are delicate in order for your completed model to be as attractive and authentic as possible. DO NOT ATTEMPT TO BEND, TWIST OR BREAK PARTS FROM SPRUE. The most effective tools to use in removing parts from their sprue are an X-acto Knife, fine clippers, or a single edge razor blade.

Be sure to test fit ALL PARTS before applying glue. The locators sometimes are slightly damaged in removing from the runner and must be trimmed before the locator holes will accept them. Generally very small amounts of glue are needed to affix styrene parts, so we recommend that glue be used sparingly. Also, when locator holes extend through the part, apply glue on the inside.

The connecting point between the part and the "runner" to which it is attached is called a "gate". In most cases the gates are designed to be trimmed completely flush with the part.

We wish to extend our thanks to John Moore, Keith Jordan, Richard Hendrickson and Dean Hale for the valuable information they made available to us in their book on Santa Fe Railway Refrigerator Cars as well as their individual counsel throughout the project. They have individually and collectively made a significant contribution toward the development of this fine model.



Step 1. Completion of Body

The first step in building your refrigerator car kit is to add the Ends (e) & (f) and Floor (d) to the Body (a). All three pieces have locator pins that aid in correct positioning of the parts.

- (A) Attach the Floor to the Body first, placing the one locator pin on the inner side of the Floor in the locator hole in the bottom of the Body shell. After test fitting, which should be done for each step during the assembly, attach the Floor to the Body using a small amount of glue around the outer edge of the Floor. There may be a small amount of play in the locator, so be sure to center the Floor on the Body.
- (B) Ends Use the Roof (b) as a guide to position the Ends in place on the Body shell. Place the roof on the shell but do not glue at this time. Using a small amount of glue around the edge of each end, put the Ends in place using the locators, and push them upward to match the in-place Roof. After giving the glue a few seconds to set, remove the Roof until a later step.

#### Step 2. Roof, Roofwalks, and Hatches

- (A) Attach Long Roofwalk (c) to Roof. There are two methods of attaching Long Roofwalk to Roof. We believe method 1 produces the best result.
- (1) Remove the four locator posts from the bottom side of the Long Roofwalk and smooth the resulting area by lightly scraping with a small file, knife, or by sanding. Put a small amount of glue on each of the mounting brackets on the Roof and the matching points on the underside of the Long Roofwalk and hold in place for a few seconds until glue starts to dry.
- (2) Using a 3/32nds inch bit, drill four holes through the Roof at the "dimples" on the underside of the Roof. Place the locators on the Long Roofwalk through the resulting holes, and glue the walk in place.
- (B) Install Hatch Hinges (s), Hatches (l) & (m), Hatch Latches (n) or (o) or (p), Hatch Stops (t), and Hatch Stop Brackets (u) as appropriate (refer to drawings). (Hatch Stops are only used on Class Rr-28 and Rr-32 with half type walks.) Locator holes for all of these items should be drilled out with a small drill to more easily accommodate the locator pins. This also allows for applying glue to the locator pins from the back or underside of the part. Refer to drawings as there are both right and left hand hatches. Hatch opening handles on the hatches are to the inside, or closer to the long roofwalk. Hatch Latches are offered in three styles so you may model your Refrigerator Car with hatches in the open, closed, or partly open position.
- (C) Install additional Walks. Surround Walks (i) & (j) are to be used on Class Rr-19, Rr-23, Rr-25, and Rr-27. Half type Walks (v) & (w) are to be used on Class Rr-28 and Rr-32. Be sure to refer to the drawings as both types have right and left hand walks. (NOTE: The correct class can be determined by referring to the printing on your model.)
- (D) Install Roof Grab Supports (k) and Roof Grabs (q) & (r). (Roof Grab Supports are only used on Class Rr-28 and Rr-32 with half type walks.)

The Roof Assembly should be set aside at this time for use in

a later step.

- Step 3. Underframe and Main Train Line
- (A) Install Left (jj) and Right (kk) Center Frame members using locators on parts and locator holes in slots in floor to position the frame.
  - (B) Main Train Line:

The Main Train Line is provided in seven pieces: an Air Tank & Air Lines (mm), Triple Valve, Brake Cylinder & Brake Rod (nn), Brake Rod & Lever (ss), Long Brake Rod (oo), Short Brake Rod (rr), Brake Rod, Chain & Bell Crank (pp) and Small Air Line and Filter (qq). These parts may be installed best in this order by referring to the underframe drawing.

#### Step 4. Floor Body Details

- (A) Corner Stirrups (ii). Locate the Corner Stirrups at each corner of the car using locator holes and glue in place. Each Corner Stirrup angles outward slightly from underneath the car body.
- (B) Center Stirrups (gg). The two Center Stirrups locate under the door on each side of the car. Using the two locator holes, they straddle the center underframe cross member.
- Step 5. End Details
  - (A) Small End Grab Irons

Place four Small End Grab Irons (y) on the car Body using locator holes next to the poling pockets on the ends of the car.

(B) Large End Grab Iron

Place two Large End Grab Irons (z), one on each end of the car, just above the first rib on the right side of the end.

- (C) Brake Housing & Air Line (bb) and Brake Rod & Chain (ff) must be assembled before attaching to brake end of car body. Glue locator on end of chain in locator notch on back of Brake Housing. Then install assembly to brake end of car using four locator holes at top of car end. Glue clevis at lower end of rod to Bell Crank and locate lower end of Air Line using adjacent locator hole.
  - (D) Brake Step

Glue two Brake Step Brackets (cc) in place. When in place, attach Brake Step (dd). Note the two grooves on the bottom of the Brake Step for location on the Brake Step Brackets.

(E) Brake Wheel

Put Brake Wheel (x) in place using locator in Brake Mechanism.

(F) End Ladders

Place End Ladders (h) in place on each end of car body.

(G) Tack Boards

Large Tack Boards (aa) may be attached to the second and third ribs from the top on each side of the car Body near the right side of the end.

- Step 6. Side Details
  - (A) Tack Boards

Large Tack Boards are placed on each side of the car,

### Santa (ff)(f) Fe (yy)<sub>&</sub> Refrigerator Car Kit 3 3 (a) (pp) $\Xi$ (b) (mm) (nn) (p) (8)

## PARTS LIST:

(a)

(j) 0 aa) (CC Surround Walk (nn) Right Side Hatch (m) Partly Open Hatch Latch Roof Grab Iron (q) Iron (y) Board (aa Bracket (kk) Z (ee) Member (k Air Lines (xx) d (z; (t) Walk (v) Assembly Stirrup (gg) Stirrup (ii) Tack Board Retaining Screw Coupler Box & Li (pp) 1 Short Brake Rod Tack Step Grab (uu) (h) Frame Stop Hatch Beam ŭ 2 End Ladder Side Large Brake Rod Small End Tank Coupler Small T Center Corner Hatch Left H End Right Air Ta Brake Brake Right E E E (z) (z) (dq) 932 7 47 2 24422 9  $\neg$ & Brake Rod Filter (qq) Brake Cylinder Wheel (x) End or Side Grab Iron Housing & Air Line (b) (i) id Hatch Walk Sprue: Side Surround Walk ( Grab Support (k) Roof Detail Sprue: Fully Open Hatch (p)
10 Hatch Hinge (s)
4 Hatch Stop Bracket (u)
2 Right Hatch Walk (w)
3ody Detail Sprue: Sprue: er (jj) (ff) (n) Rod & Lever (ss) (hh) Sprue: k Sideframe (tt) Bolster (vv) Long Brake Rod (oo) Bell Crank, Chain & Small Air Line & Fi Left Side Hatch (1) Closed Hatch Latch Brake Wheel (x)
8 Large End or Side
1 Brake Housing & Ai
1 Brake Step (dd)
1 Brake Rod & Chain
2 Roofwalk Bracket (Underframe Detail Sp Chain (g) Malk Member <u>ပ</u> (11) Triple Valve, Surround Hatch Left Frame R Glad Hand ( Long Roofwalk dder Sprue: Side Ladder Left Side Roof Grab (e) End Sprue: "A" End (e Coupler Floor (d) Coupler Brake Truck حي Ladder Hatch 2 Left 4 Clos Truck Body 4 F 10 42 4 12 10 9 6 12843  $\infty$ 

# RECOMMENDED TOOLS:

Vice Pin Tweezers Screwdriver Razor Blade Small Phillips Scr ngle Edge I Small Dri Single Emery Board Liquid Styrene Cement Fine Clippers File or Knife Small Xacto

rts and fine part instructions, and study the drawings and parthem. Some of the detail parts are very fine D0 with blade. 1.8 the sprue razor edge raze HE PARTSI delicate. The best way to remove them from clippers, an Xacto knife or a single edge ATTEMPT TO BEND, TWIST, OR BREAK OFF THE PA TWIST, assembling them. the read Please before

styrene oy this fit and check for flash. When or a blade to help position the are needed to affix styrene enjoy and knife your into Before gluing any of the parts, test attaching small parts, use tweezers opart. Very small amounts of glue plastic. So slip that new blade in plastic. kit.