InterMountain Railway Company P.O. Box 839, Longmont, CO 80502 Phone: (303) 772-1901 Web Site: www.intermountain-railway.com E-Mail: intermountain@intermountain-railway.com N-Scale Modified **AAR 40' Boxcar** (8 Rung Ladder, 4-4 Improved **Dreadnaught** Ends) (c) (u) (i) 1: Roofwalk: (a) Roof: (b) Body: (c) Underframe: (d) Detail Sprue (Body Ends): 1 Brake End (e) 1 Non-brake End (f) Detail Sprue (Brake Rods): 1 Brake Rod with Brake Cylinder (g) 7: Detail Sprue (Triple Valve): 2 Body Mount Coupler Box (h) 1 Triple Valve & Air Tank (i) 2 Coupler Box Cover (i) 8: 2 Side Ladder: (k) 9: 2 End Ladder: (i) 10: Detail Sprue (Body Details): 2 Roofwalk Grab Iron (m) 8 Bracket Grab Iron (n) 4 Straight Grab Iron (o) 4 Large Tack Board (n) Recommended Tools: 1 Brake Assembly (q) 2 Small Tack Board (r) 1 Brake Wheel (s) 2 Stirrup Step Left (t) X-acto Knife Fine Clippers Tweezers 11: Detail Sprue (Doors): Small File or Emery Board Pin Vise 2 Operating Door (u) 12: Trucks: Small Drill Set Liquid Styrene Cement 2 Truck W/Coupler Box (v) Magnifier Small Phillips Screwdriver 2 Coupler Box Lid (w) 2 Coupler (x) 4 Wheel Set (v) 2 Truck Pin (z)

N-Scale Modified AAR 40' Boxcar (8 Rung Ladder, 4-4 Improved Dreadnaught Ends) GENERAL INSTRUCTIONS:

Please read the instructions and study the drawings and parts before beginning assembly of this kit!! Many of the parts are very 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 or fine clippers.

It is best 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 parts, apply glue on the inside.

The connecting point between the part and the "runner" to which it is attached is called a "gate". The gates are designed to be trimmed completely flush with the part except in those cases where the part itself is used as the gate.

ASSEMBLY INSTRUCTIONS:

Step 1: Completion of Body

Complete the body by adding the Ends (e & f) and Underframe (d) to Body (c) shell using locators on the parts and locator holes in the body. Glue as necessary.

Step 2: Underbody Detail

- (a) Glue Triple Valve and Air Tank (i) with adjoining lines in place. Large locator on bottom of triple valve matches with locator hole in post near outside edge of underbody. Locators on underside of air tank then match up with locator holes on opposite side of underbody.
- (b) Glue Brake Rod with Brake Cylinder (g) in place. Locator on bottom of brake cylinder matches locator hole on post near center of underbody. Ten other locator pins then match locator holes on bottom of underbody.

Step 3: End Body Details

- (a) Attach Brake Assembly (q) to brake end of car using five locators on back of assembly and matching locator holes on car body. Glue Brake Wheel (s) in place using locator hole near the top of the brake assembly.
- (b) Place End Ladders (l), Straight Grab Irons (o) and Bracket Grab Irons (n) on each end of the car using locators on parts and locator holes in ends of body.
- NOTE: (Be sure to test fit ladders before installing as the locator pattern is designed so that the end ladders and side ladders cannot be confused or installed upside down.)
- (c) Locate a Large Tack Board (p) on each end of the car body. Location varies so reference should be made to photos or drawings as desired.

Step 4: Side Details

(a) Place Side Ladders (k), Bracket Grab Irons (n) and Stirrup Steps (t) on each side of the car using locators on parts and locator holes in sides of car body.

Step 5: Roof, Roofwalk

- (a) Prepare Roof (b) by removing the four pins on the underside of the edge of the roof. Remove excess material with an X-acto knife or small file.
- (b) Locate Roofwalk (a) on roof using four locator pins on roofwalk and four locator holes in roof. Glue roofwalk in place at each end bracket and at locator pins on underside of roof.
- (c) Glue Roofwalk Grab Irons (m) in place using locator "feet" on grab irons and locator holes at opposite corners of roofwalk.
- (d) IF YOU ARE GOING TO WEIGHT YOUR MODEL, BE SURE TO DO SO BEFORE GLUING ROOF IN PLACE. (The NMRA standard weight for a completed 40 foot car is .95 ounces.)
- (e) After test fitting roof, carefully put in place on car body. Roof may be glued in place, or press fit. If glued, it is suggested that only a small amount of glue be used.

Step 6: Doors, Tack Boards

- (a) Locate a Large & Small Tack Board (p & r) on each of the Doors (u). Reference should be made to photos or drawings as desired.
 - (b) Slide and snap finished doors into place on car body.

Step 7: Trucks and Couplers

- (a) Place Couplers (x) in Coupler Boxes (v) and retain by press fitting Coupler Box Covers (w).
- (b) Add Wheel Sets (y) to truck assemblies.
- (c) Attach truck assemblies to car using Truck Pins (z).
- (NOTE: Optional Coupler Boxes (h & j) have been included in the parts to body mount the couplers if desired. If trucks are to be body-mounted, the coupler box on the truck must be removed.)