Step 7: Side Ladders (y), Grab Irons With Mount (cc) and Stirrups (m & n)

- (a) Remove the two eight-rung side ladders from the detail parts sprue and glue one on each side at the right hand end of the car. The locator holes will only allow the ladder to fit one way. Test fit and glue in place.
- (b) Remove the grab irons with mount from the sprue and glue two on the left end of each side of the car. Use the offset locator holes.
- (c) Stirrups are located on the ends of each side of the car under the side ladder and side grab irons. Stirrups are to be mounted with heavy end of mounting bracket towards the end of the car and the flat surface towards the center of the car. Test fit and glue in place.

Step 8: Doors (d)

(a) Remove the doors from the sprue, being careful not to break the long tab. These doors slide and will operate when installed. Tilt the top of the door to the right and insert in the door opening. Keep the door pushed to the top of the opening and rotate the door to the left (vertical). The door should snap into place and slide open and closed.

Step 9: Continuation of Step (1), Roof and Roofwalk

(a) Test fit roof to car body. If weight is to be added <u>do it now!</u> (NMRA recommended weight for this car is 3.88 oz. It will be necessary to add 2.0 oz.) When ready, glue roof to car body. Glue Roofwalk Grab Irons (v) to roofwalk using the locator dimples. Roofwalk End Brackets (o) are glued in place under the ends of the roofwalk and against the top of the end of the car. This bracket should be at an angle out toward the end of the roofwalk.

Step 10: Tack Boards

(a) Large Tack Boards (s) and Small Tack Boards (t) may be installed in various locations. Refer to the drawing for typical placement. For more information refer to prototype sources.

Note: Your car is now ready to put into service on your model railroad empire. We hope 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 damaged, or if you should break or lose one, please contact your dealer or the company for a replacement.

THANK YOU FOR PURCHASING AN INTERMOUNTAIN KIT!!

INTERMOUNTAIN RAILWAY COMPANY

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HO Scale 12 Panel 40' Boxcar

(Riveted Steel Sides)

PARTS LIST

PARTS LIST							
1. Body (a)	7. Body Detail Sprue (Continued):						
2. Roof (b)	2 Small Tack Board (t)						
3. Roofwalk (c)	1 Brake Wheel (u)						
4. Door Sprue (d)	2 Roofwalk Grab Iron (v)						
5. Underframe (e)	1 "B" End Long Grab Iron (w)						
6. Underframe Detail Sprue:	1 "A" End Long Grab Iron (x)						
2 Glad Hand (f)	8. Ladder Detail Sprue:						
1 Underframe Brake Rigging (g)	2 Long Side Ladder (y)						
1 Bell Crank, Chain & Rod (h)	2 Long End Ladder (z)						
2 Coupler Box (i)	1 Short "A" End Ladder (aa)						
2 Coupler Box Lid (j)	1 Short "A" Side Ladder (bb)						
1 Brake Rod (k)	8 Grab Iron W/Mount (cc)						
7. Body Detail Sprue:	9. Car End Sprue:						
4 U-Shaped Grab Iron (1)	"A" End (dd)						
2 Stirrup Step Right (m)	"B" End (ee)						
2 Stirrup Step Left (n)	10. Truck Sprue:						
2 Roofwalk End Bracket (o)	4 Sideframe (ff)						
1 End Brake Assembly (p)	2 Bolster (gg)						
2 Brake Step Bracket (q)	2 Brake Beam Assembly (hh)						
1 Brake Step (r)	11. Wheel Pack:						
4 Large Tack Board (s)	4 Wheelset (ii)						
	2 Retaining Screw (jj)						

RECOMMENDED TOOLS:

TECONIMET IN TO USE.								
X-acto K	nife	Fine Clip	pers	Small	File or Eme	ry Bo ar d	Tweezers	
Pin Vise	Small	Drill Set	Small	Phillips So	crewdriver	Liquid S	tyrene Cement	

Please read the instructions, study the drawings and parts before assembling them. Some of the detail parts are delicate. The best way to remove them from the sprue is with fine clippers or an X-acto knife. DO NOT ATTEMPT TO BEND, TWIST, OR BREAK OFF THE PARTS!!

Before gluing any of the parts, test fit and check for flash. When attaching small parts, use tweezers or a blade to help hold them. Only small amounts of glue are needed to affix styrene plastic.

ASSEMBLY INSTRUCTIONS:

Step 1: Roof (b) and Roofwalk (c)

There are two methods of attaching the roofwalk to the roof. Method (b) below is the easiest of the two methods, but we believe that method (a) produces the best result. The choice is yours. See enclosed modernization section for this car.

- (a) Remove the four locator posts from the bottom side of the roofwalk, and smooth the area by lightly scraping with a small file, knife, or by sanding them flat. Put a small amount of glue on each of the mounting brackets on the roof, on the underside of the roofwalk, and on the locator pins on the ends of the roofwalk extensions. Attach roofwalk to roof and set aside to dry and for later use.
- (b) Using a 3/32nds inch drill bit, drill four holes through the roof at the "dimples" on the underside of the roof. Place the locators of the roofwalk through the resulting holes, and glue the walk in place. Set the assembly aside to dry and for later use.

Step 2: Underframe and Underframe Details

- (a) Remove the Underframe (e) from the underframe sprue. The short projections between the runner and the underframe are "gates" and should be trimmed from the underframe members.
- (b) Remove all of the center sprue from the bottom of the car Body (a). (This is the point at which the plastic enters the mold to form the car body.) Glue the underframe in place on the car body. There is a locator pin on the underframe and a locator hole on the car body so that the part will fit only one way.
- (c) Carefully remove the Underframe Brake Rigging (g) and Brake Rod (k) from the runners. Trim the gates as described above. The locator pins on the brake rigging and brake rod fit in the holes of the underframe and floor only one way. Test fit and then glue in place.
- (d) Bell Crank, Chain and Rod (h). Attach this assembly by inserting the long locator pin, at the bell crank, into the hole in the end sill. Trim the pin on the end of the brake rod to fit the dimple in the bolster and glue both locators in place.
- (e) Glad Hands (f). Attach the glad hands using the locator on the bottom of the car body beside the coupler box mounting pad.

Step 3: Trucks and Couplers

(a) Couplers. Mount couplers in Coupler Box (i) and glue Cover (j) in place. (Use the InterMountain operating coupler or other coupler of your choice.) When dry, attach to the car body using the locator pin provided.

(b) Trucks. Remove Sideframes (ff), Bolsters (gg), and Brake Beam Assemblies (hh) 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. Insert Wheelsets (ii) and mount trucks on car body using the Retaining Screws (jj) provided.

Step 4: Ends (dd & ee)

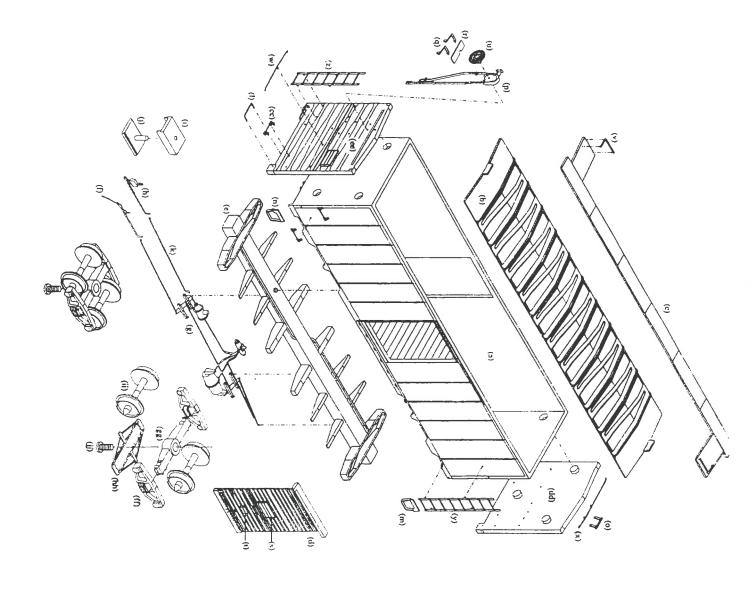
(a) Attach the ends to the car using the locator pins on the ends and the holes in the ends of the car body. Test fit and then glue in place.

Step 5: "B" or Brake End Detail (The details in this step are found only on the brake end of the car.)

- (a) End Brake Assembly (p). Remove the assembly from the sprue. Locate the assembly on the "B" end of the car using the locators on the back of the brake housing and on the airline near the bottom of the end. The clevis on the brake rod fits on the end of the bell crank. Test fit and glue in place. The Brake Wheel (u) is glued in the hole on the front top of the brake housing.
- (b) Brake Step (r) and Brake Step Brackets (q). Remove brake step and brackets from the sprue. Attach the brackets to the car end placing locator pins in the four holes adjacent to the chain. Flat surfaces of the mounting brackets should be facing upward. Glue the brake step in place on the top of the mounting brackets. Notch in step fits around the chain. Recessed areas on the under side of the step are provided to fit over the brackets. The brake step when in place should be about 1/16th inch away from the car end.
- (c) "B" End Long Grab Iron (w). Remove grab iron from sprue. Test fit and glue into place.

Step 6: End Ladders (z) and Grab Irons

- (a) End ladders are the short seven-rung ladders. Remove both end ladders from the body detail sprue. Attach one ladder to each end of the car using the four locators. They can be held in place using a small amount of glue.
- (b) End Grab Irons. There are two types of end grab irons. The "U-shaped" Grab Irons (l) are attached to the bottom of the ends, on the tabs, in the locator holes. The Grab Irons With Mount (cc) are attached in the offset holes at the bottom right of the ends above the "U-shaped" grab irons.
- (c) "A" End Long Grab Iron (x). Remove grab iron from sprue. Test fit and glue into place.



12 Panel 40' Boxcar

were constructed with 12 panel steel sides and riveted seams. The car that we are modeling had diagonal panel roofs and improved dreadnaught ends. The interior dimensions of this car were 40'6" long, 9'2" wide, 10'0" high, 3715 cu. ft. capacity and a 100,000 lb. load capacity. This unique 40' boxcar was first built in 1948 for the Great Northern Railroad. These cars

comes with either the Youngstown/Camel or the Superior 7-panel door, whichever is correct for the # series on that release. door with Camel fixtures and hardware. The majority of these cars were produced originally with a 6' Youngstown (corrugated) ith Camel fixtures and hardware. Several other door types were also used. Our model

These are the car # series that are correct for this model: G.N. 11375-11874 blt. 1948

N. 11375-11874 blt. 1948 18000-18499 blt. 1949 18500-19499 blt. 1949 19500-20499 blt. 1949

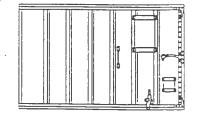
Additional railroads for the 12 panel 40' boxcar:

Southern Pacific blt. Burlington Northern (former G.N. cars with B.N. paint schemes) D & RGW SP & S cific blt. 1948 (same end minus a thin top rib) (same car but with 10'6" IH instead of 10'0" or 13000-13499 blt. 1949 or 10'2")

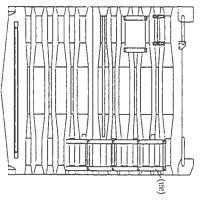
worn out. These 40' boxcars primarily shipped grain and in most cases were used until they were ut. It is said that the average life of a freight car is approximately 22 years.

Modernization Section

These drawings indicate location of tack boards after approximately 1955.







Cars stenciled after 1967 had no roofwalk or long ladders on "A" end of the car. Use (aa) ladder for the end ladder and (bb) ladder for the side ladder. Long ladders were used on the "B" end & side of the car.