Picture furnished by Robert Schleicher & Railmodel Journal

Longmont, Co.

80502

P.O.Box



The National Steel Car Co. commonly referred to 59 foot, 4550 cubic foot capacity cylindrical covered hopper is the prototype commonly referred to as the "Canadian grain car". Between 1972 and 1985 type of

"History

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The

Prototype"

for our model. almost 20,000 transporting This car is 9 quantities InterMountain Railway railways Companies Ha Co.

InterMountain

InterMountain Railway Company

P.O. Box 839 Longmont, Co. 80502

Phone: (303) 772-1901

Parts List:

1: Roofwalk: (i)

2: Body: (b)

3: Floor (Hopper Bottoms): (c)

4: Detail Sprue (End Ladders):

4 Stirrup Steps (w)

1 Brake Wheel Housing (n) 2 End Ladders (m)

32 Roofwalk Supports (4 Extra) (k) 2 Brake Platforms (p)

1 Bell Crank/Chain (q) 1 Brake Wheel (o)

5: Detail Sprue (Side Ladders):

2 Right Side Ladders (I) 2 Left Side Ladders (I)

4 Bolster Caps (2 Extra) (r)

2 Coupler Box Covers (d)

2 Coupler Boxes (d)

2 End Roofwalk Supports (2 Extra) (X)

2 Air Hoses (u)

2 Long Grab Irons (t)

8 Short Grab Irons (2 Extra) (s)

13 Hinge Eyelets (5 Extra) (h)1 Large Air Line (g)

2 Small Air Lines (f)

6: Detail Sprue (Roof & Bay Dividers):

1 Roof (e)

3 Bay Dividers (a)

7: Detail Sprue (Brake Details): 4 Hopper Bottoms (v)

1 Retainer Valve (q4)

4 Top Round Hatch Covers (i)

1 Small Air Line (g8)

1 Triple Valve (q6)

1 Triple Valve Mount (q5)

1 Large Air Tank & Line (g1)1 Small Air Tank (g2)

1 Round Air Tank & J Valve (q3/q7)

8: Truck Package:

2 #2 Sheet Metal Screws

2 Trucks

9: Detail Sprue (Brake Beams):

4 Air Cylinder Brake Beams 4 Standard Brake Beams

Recommended Tools:

Xacto Knife Fine Clippers Liquid Styrene Cement (Bottle or Tube) **Tweezers**

Small File or Emery Board

Pin Vice Small Drill Set

Small Phillips Screwdriver

Please read the instructions, study the drawings and parts before assembling them. Some of the detail parts are very fine and delicate, the best way to remove them from the sprue is with fine clippers or an Xacto 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 position the part. Very small amounts of glue are needed to affix styrene plastic. So slip that new blade into your knife and enjoy this kit.

Step I: Body & Floor

On one side of the floor casting(c) note the four sprue gates. Sand these smooth for best fit. Remove dividers(a) and sand off sprue gates. Now install inside car. Carefully cut large sprue from top of car body. No weight has been supplied with kit but now is the time to add desired amount of weight.

The floor(c) has locating pins spaced differently at each end which fit into holes in the car body(b) so that the floor can only be attached one way. Glue floor to body.

Step 2: Trucks & Couplers

Carefully cut all sideframes and bolsters from sprues. Press sideframe pin into hole at end of bolster until you feel a snap. Sideframe is then locked in place. Repeat for other sideframes.

Slip wheel/axle assembly into place.

Cutting very close to the sprue, remove brake beam shown in drawing and mount in the holes on the inside of the sideframe at the base of the bolster.

Test fit couplers at this time. Kadee #5 coupler is recommended. For best results remove the trucks and couplers and install last.

Step 3: Body & Roof

Test fit the roof(e) to the top of the car body. Apply a small amount of glue to the body and snap on the roof, making sure that it is completely in place along the sides.

Step #4: Brake System

Add the brake system now as per drawing. Always be careful when removing parts from sprue. Cut all pipes close to sprue and then trim to exact length. Be sure all holes in car floor are drilled all the way through to insure best fit

Install the retainer(g4) first as it is a tight fit against the inside of the car side sill. Follow by installing triple valve mount(g5) and then the triple valve(g6) on top of base. Continue to add parts and pipes as per overhead drawing working from right to left. Small air line(g8) is best left until last.

Step #5: Hatches & Hinges

Test fit hinges(h) in hinge locator holes adjacent to hatch openings in roof, being sure that eyelet opening faces toward the hatch opening. (It may be necessary to open locator holes slightly using a #61 drill (.039) before gluing hinges in place.) After allowing time for hinges to dry, snap hatches(i) into place.

Step 6: Roofwalk & Roofwalk Supports

Open the pilot holes in the hopper side and roof with a #67 (.032) drill for a better fit of the roofwalk support pin locators. Remove the roofwalk supports(k) using a very sharp hobby knife and carefully cut them from the sprue using a hard surface as a cutting base. While holding each support with tweezers, apply a small amount of glue to both pins and insert first the side pin and then the top pin. Take your time with the first few and you will discover that they will get much easier. When all of the supports have been glued and are dry, attach roofwalk(j).

Step 7: End & Side Ladders

Carefully clip the end ladders(m) and side ladders(l) from the sprues. All sprue gates on both (m&l) should be sanded smooth before assembly to insure a flat, tight fit. Glue the end ladders in place as shown in drawing (7a), stepped end at base. Ladder end with 2 extra bars mounts on B end. The thinnest vertical edge of the side ladder will be towards the end ladder. Put the side ladder inside and under the roofwalk and platform, then, with your knife blade or tweezers slide the ladder towards the end and into place with the side ladder up against the end ladder as shown in cross section drawing (7b) and corner drawing (7c). Repeat this for all of the side ladders.

Step 8: Brake Wheel, Housing & Platforms

Clip the brake housing(n), brake wheel(o), brake platforms(p) and bell crank/chain(q) off the sprue. Glue the brake wheel to the brake housing but do not push the brake wheel so far through the housing that the locating pin sticks out the rear. Now glue the brake platforms(p) into place on either end of the car being sure the platform with the rectangular opening is mounted on the brake end of car. Now glue the brake housing assembly (n/o) into place on the end ladder. Next attach the bell crank/chain(q) assembly to the car using the small locator hole under the car.

Step 9: Bolster Caps, Grab Irons & Air Lines

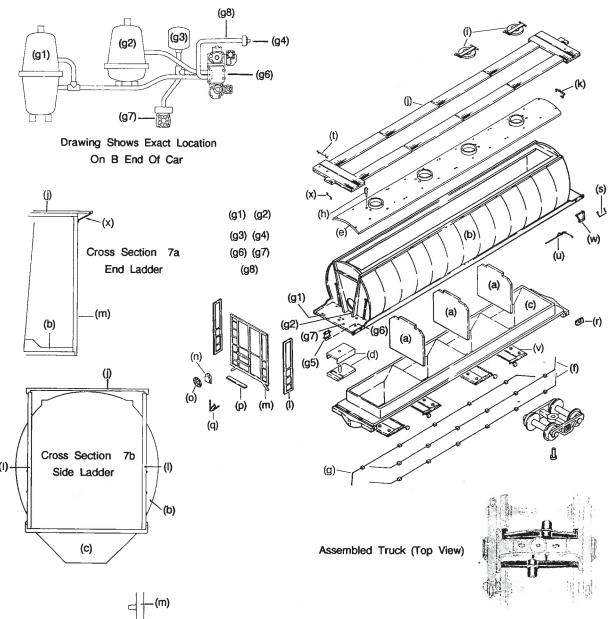
Clip off the bolster caps(r) and glue them to the ends of the bolsters. Before clipping the grab irons from their sprue it is best to run a #77 (.018) drill through all grab iron mounting holes to insure proper fit. Short grab irons(s) are to be glued to the sides and ends of the car. Glue the long grab irons(t) to the roofwalk. Clip the air hoses(u) from the sprue and glue to the bottom of the car.

Step 10: Hopper Bottoms

Clip the hopper bottoms(v) from the sprue and glue them to the floor as shown in drawing. The two end doors face towards the center of the car and the center doors face towards the ends. At this time also glue the stirrup steps(w) to the rear underside of the platform.

Step 11: Roofwalk Supports

Attach end roofwalk supports(x), one at each end, under roofwalk. Attach the coupler boxes and the trucks with the screws provided.



Top View 7c Looking
Down Through Roofwalk

(b) (1)

The car is now ready to put into service on your rail empire. We hope that you have enjoyed building this model and will continue to enjoy running or displaying it. We welcome comments on this model and also suggestions for future projects.

NOTE: if you find that a part is missing or defective, or if you should lose or break a part, please contact your dealer or write us for a replacement.

Thank you for purchasing an InterMountain Railway Company model kit!!!