



CP 141504, Canmore, AB. July 29, 1982. Andy J. Broscoe Photo. Lower third of door has been repaired.

# Series	# Built	Year Built	Roof type	Brake type	Builder
140950-141699	750	(1-2) 1954	Dia Panel	Ajax	NSC
142200-142699	500	(10-11)1955	PS-1	Ajax	NSC

History

Between 1954 and 1955, Canadian Pacific took delivery of 1350 40' boxcars from National Steel Car (NSC) of Hamilton Ontario. The orders specified 10'6" interior height and 6' doors, built to the AAR standard but with the unique National Steel Car end known as the NSC3.

NSC supplied Youngstown doors that differed from their American-built cousins in the way the three panels were joined. The Canadian style door had rivets in the valley of the corrugations, whereas the American version used a raised panel area to accommodate the rivet joints.

The as-delivered herald stencilled onto these cars was Canadian Pacific's 3 Step Block design. In later years, many of these cars would be repainted in the Script or Multimark designs. The decals in this kit included will be either the 3 step block or script versions.

Instructions

Three parts lists are included at the end of these instructions. *Parts Included in This Kit* needs no explanation. Select from the *Parts Sourced by the Modeller* list depending on which version of the prototype car you are building.

The level of detail you choose for your model will affect the construction time. A model built with the parts included with the Intermountain kit will yield a fine model, but substituting from the third list of *Suggested Optional Parts* will yield a more accurate car. Of course, the savvy model builder might find ways to enhance their model beyond what's outlined in these instructions, and we'd love to see your work.

Construction

Start off by cleaning the resin parts of any remaining mold release. Cleaning with 'Shout', orange type degreaser or dish soap and water will all give satisfactory results.

Remove flash from the resin parts by sanding on a flat surface such as plate glass or a bench top. 200-grit sandpaper works well for this. Take your time and make sure to sand the parts to an even thickness. Rotate the part as you go to ensure you don't sand any one area more than the rest of the part. If the castings have any small pin holes, they can be filled with auto body glazing compound or Squadron filler for plastic models.

Next, add weights to your car and making sure the glue is dry before proceeding. Apply your favourite couplers and mount the trucks.

Depending on which roof is used, it may require some filing or trimming to fit the intermountain body. Test fit to see if the body's false end needs trimming. Once you're satisfied with the fit, hold the roof on with elastic bands while the ends are fitted, but don't glue it on yet. Fit the resin ends onto the false end of the body shell and make sure you are happy with their fit against the roof. Sand or file as needed to get a snug joint. When you're satisfied with the fit, apply a small drop of ACC to the end of the body, and press the end in place while using the roof to line it up. Repeat on the other end. With the ends tacked in place you can remove the roof and apply ACC from the inside of the body, through the holes in the false end. Then apply very small amounts of ACC to the edges of the end/body joint, being careful not to let any ACC creep onto the face of the end. Keep a corner of a paper towel nearby to soak up any extra ACC.

With the kit ends now attached to the body, glue the roof in position.

Moving to the door, sand and trim any flash and glue it in place. Add the tack boards to the doors and ends. Drill two holes in the door and glue a handle made from 0.010" wire.

If you plan to use the Intermountain kit parts, follow the kit instructions for the remainder of the build. To follow our lead with upgrades to the Intermountain kit, continue following these instructions.

Glue Intermountain underframe into the body and move to preparing the etched parts. Start by passing a #79 drill through all the holes to open them up to final size.

Our kit substitutes an AB brake set from Tichy along with phosphor bronze wire for the brake pipes and rods.

Use 0.012" for the other brake pipes and 0.010" for the brake rods. Glue the reservoir, cylinder and valve to the etched brackets and then glue to the car (see photos for placement).

Install the slack adjuster (resin part), then follow up with the brake hangers using Tichy Straight Grabs. Glue the Brake levers in place. Attach the slack adjuster plate (the etching with the holes in it) on top of the resin part you glued earlier (see photos).

Tichy turnbuckles with one end removed are used to simulate clevises on the brake rods. The line to the retainer valve is made with 0.010" wire and a short length of 40 link per inch chain. Make a small 'U' of 0.010" wire and pass it through the end of the chain and glue to the brake lever.

Mark and drill holes for the ladders. Canadian style ladders with attached sill steps from Des Plaines Hobbies are included in the kit.

Install bracket grabs by Kadee in the sides and ends. Cut off the left side of the end bracket mount, leaving a flat pad with the rivet detail. Glue this directly to the rib of the end.

Uncoupling levers are made from 0.010" wire held on with Yarmouth Model Works eye bolts. Small pieces of styrene are used to attach the cut levers to the ladders (see photos).

Glue the running board on with a flexible glue such as Walther Goo or Canopy cement. Add the remaining grabs to the running board laterals and on the drop grab to the lower right side of each end (see photos).

Remove the lower side end tab even with the side sill. Apply the sill steps (see photos). Pin the sill steps to the car with 0.012" wire for strength.

Bend the air hose brackets per the photos and install your favourite brake hose using a small 'U' made from 0.008" wire. Cut and drill out the brake hose with a 0.015" drill bit and add a short length of 0.015" wire. Attach it to a hole drilled in the bolster. Install the brake housing and wheel; a mount can be made from three pieces of 0.010" x 0.030" styrene (see photos).

Install the brake step. Next install the brake rod trunnion on the bottom of the end. Fit the brake wheel rod (0.010" wire and 40 link per inch chain) to the housing.

Lastly, install the the retainer valve and retainer pipe using 0.008" wire (see photos for placement).

See photos below for more detail and placement of specific parts.

Painting and Finishing

Before painting be sure to clean the model with mild soap using a soft toothbrush. Let it dry completely. A primer coat will always yield better results in your paint finish. Take this opportunity to spot sand out any imperfections before applying the top coats of paint. Scalecoat CN#11 Mineral Red was used, and per prototype practice, the trucks were painted the body colour. If you use another type of paint, be sure to gloss coat before applying the decals.

Apply the decals using water or Microscale Microset. Allow them to dry completely before applying setting solution like Microscale Microsol. Just touch the decal edge with your brush and let capillary action pull the setting solution under the decal. Seal the decals with Tamiya XF-84, or your favourite clear flat.

Weather your car using your favourite mediums, and place it in service on your layout. Congratulations, you're done!

Thank you for purchasing this Mini Kit. National Scale Car thanks, in no particular order, Pierre Oliver, Ted Culotta, Al Ferguson, Doug Currie, and Hunter Hughson for their support in bringing this kit to market.

The castings are the property of National Scale Car and may not be reproduced in any form.

Parts List - Supplied

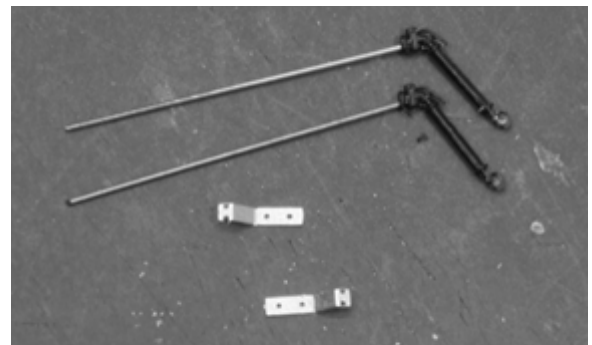
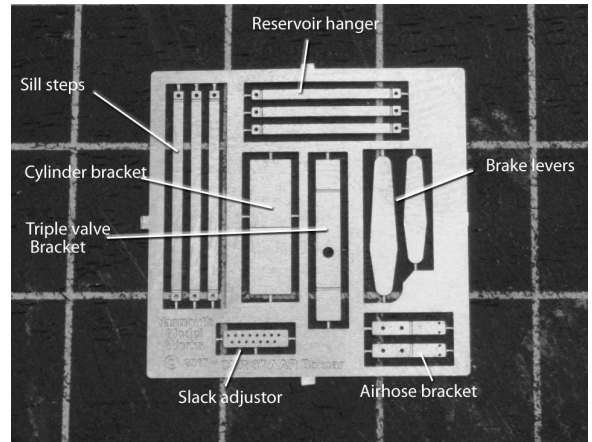
NSC3 Ends
Canadian Style Youngstown Doors
Tack Boards
Slack Adjuster
Etched details(CN 1937 AAR...same for CP)
Black Cat Decals
Des Plaines Hobbies Canadian Style Ladders

Parts List - Modeller Sourced

InterMountain 40' Boxcar with 10'6" IH
Couplers
Paint
Intermountain PS-1 Roof or
Intermountain/Branchline Dia. Panel Roof

Optional Parts

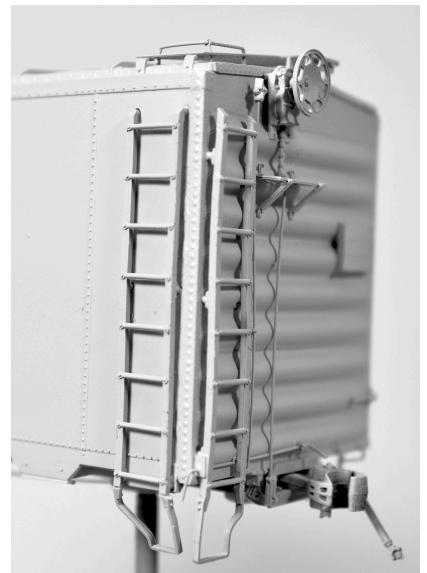
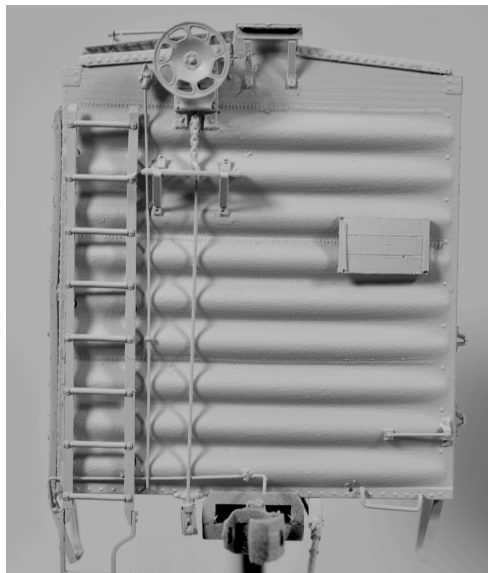
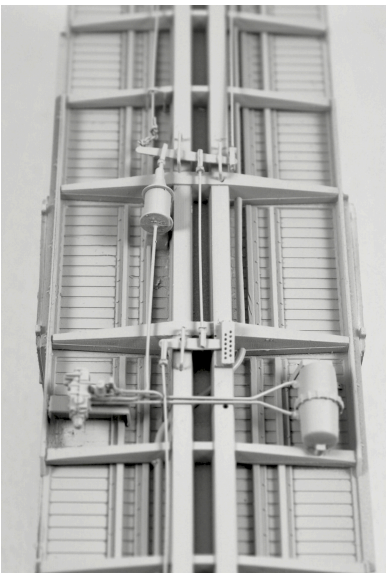
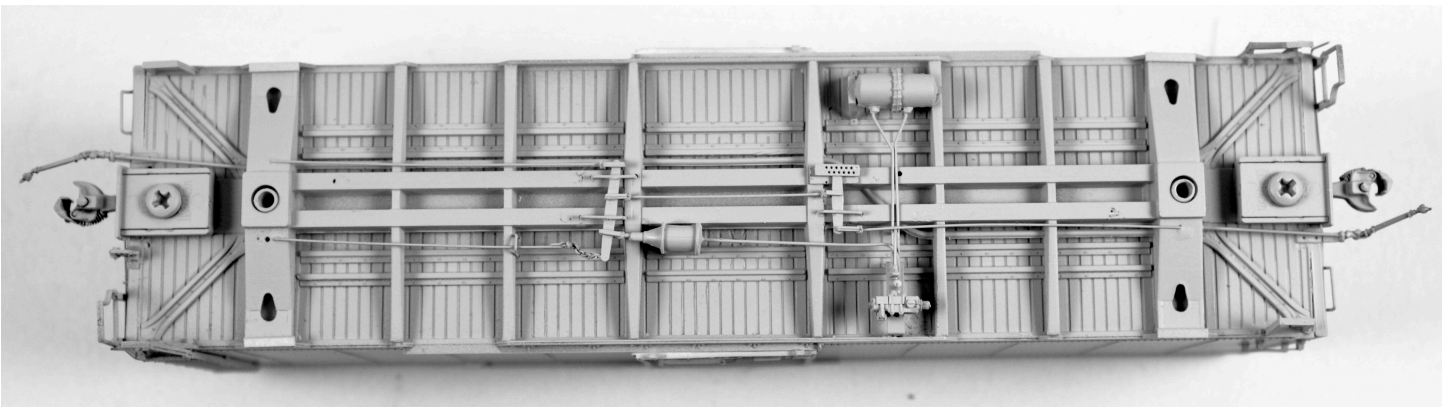
AB brake set
Phosphor bronze wire (0.008", 0.010", 0.012", 0.015")
Tichy Turn buckles
Exact Rail or Branchline Barber S2-A Spring Plankless Trucks (50 Ton)
Yarmouth Model Works Eye bolts
Kadee Bracket Grabs



MK101 - CP 10'6" AAR CAR WITH NSC3 ENDS



CP 140902 WITH 4-4 IDE ENDS IS SHOWN TO ILLUSTRATE THE 3 STEP BLOCK LETTERING SCHEME, BOWNESS, AB. AUGUST 9, 1991. ANDY J. BROSCOE PHOTO.



MK101 - CP 10'6" AAR CAR WITH NSC3 ENDS

