

Step 5: Ends Continued

(d) Starting with the non-brakewheel (A) end of the car, position the end ladder assembly in place on the car. Cement the bottom edge of the end to the end of the car platform. Note the small boltheads molded into the side of the car. These line up with the vertical ladder stiles. The lower end of the stiles should be glued into the notch in the side sill directly above the grab iron. Repeat for the brakewheel end.

Step 6: Trucks and Couplers

(a) Install couplers of your choice in the coupler boxes. The boxes are sized to accept the most popular HO scale couplers including InterMountain couplers and Kadee no. 5's.

(b) Secure the coupler box lids (w) using the flathead screws provided.

(c) Install the wheels in the truck sideframes and then install the trucks to the bolsters.

Note: Your completed model is now ready for years of service on your HO scale model railroad.

THANK YOU FOR PURCHASING AN INTERMOUNTAIN KIT!!

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HO ACF 4650 Cu. Ft. Centerflow 3-Bay Hopper

PARTS LIST

- | | |
|-----------------------------------|-------------------------------------|
| 1. Roof (a) | 8. Body Detail Sprue Continued: |
| 2. Body (b) | Pneumatic discharge pipe (x3) (i) * |
| 3. A End (p) | Brake Cylinder (j) |
| 4. Brake Wheel (B) End (q) | Brake Reservoir (k) |
| 5. Side Ladders (x4) (r) | Triple Valve (l) |
| 6. Etched-metal running board (d) | Brake Pipe, Long (m) |
| 7. Hatch Sprue: | Brake Pipe, Short (n) |
| Roof Hatches (c) | Ladder Brace (x2) (o) |
| 8. Body Detail Sprue: | Ratchet Assembly (s) |
| Running board grab irons (x2) (e) | Brakewheel (t) |
| Bolsters (x2) (f) * | Stirrup Steps (u) |
| Trainline (g) | Air hoses (x2) (v) * |
| Gravity Discharge gates (x3) (h) | Coupler box covers (x2) (w) |

* Not Shown - See Photo

RECOMMENDED TOOLS:

X-acto Knife	Magnifier	Small File or Emery Board	Pin Vise
Small Drill Bits	Tweezers	Liquid Styrene Cement	Small Phillips Screwdriver
Reamers	CA such as "Zap-A-Gap"	Fine parts nippers	

GENERAL INSTRUCTIONS:

Please read the instructions carefully before starting 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 THEIR SPRUE!! The most effective way to remove these parts is to use a sharp X-Acto knife, a despruing nippers, or a single edge razor blade.

Test fit the parts before applying glue. The locator pins are sometimes slightly damaged when removing the part from the runner and must be carefully trimmed before they will fit in the hole. It is not uncommon for the holes to fill slightly with plastic. Therefore we recommend opening all the locator holes slightly using a pin vise with either a #72 drill bit or a small reamer.

Very small amounts of glue are needed for assembly. We recommend liquid styrene cement such as Testors or Tenex for all plastic-to-plastic joints. Whenever possible apply the cement to an area that will not be visible on the completed model. It's a good idea to use a small paintbrush to apply the liquid cement since the brush that comes with the bottle isn't really useful for applying the small amounts of adhesive needed for assembly. For plastic-to-metal joints we recommend you use cyanoacrylate adhesive (CA), also called "ACC" or "Super Glue."

Inspect all parts before starting assembly. If a part is missing or damaged, or if you break or lose a part, please contact your dealer or InterMountain for a replacement.

ASSEMBLY INSTRUCTIONS:

Step 1: Weight

It's a good idea to add weight to the body at this time. You will need to add about 3 ounces of weight to bring the car up to NMRA Recommended Practices. Several manufacturers offer weights with double-sided tape that can easily be added at this time. Always try to keep the weight as low in the car as possible and evenly distributed.

Step 2: Roof

NOTE: The small vertical tabs along the top of the roof are used to locate and support the running board. Do not remove these. Use extreme care when handling the roof so you don't break them off or bend them!!!

a. Inspect the roof. Make sure the small slots located directly adjacent to the vertical tabs on the roof are open (hold the roof up to the light). If they aren't, open them up with a reamer or a sharp hobby knife.

b. Test fit the roof (a) to the body (b). DO NOT GLUE IT IN PLACE AT THIS TIME. Adjust the fit as needed. It may be necessary to trim a small amount of plastic from the recessed area on the inside edge of the roof to ensure a tight fit. Note there is a locator tab on the inside of one end of the body and a matching notch on one end of the roof.

c. The kit offers a choice of three different roof hatches (c). Using prototype photos as a reference, install your choice of hatch at this time. (The majority of these cars were delivered with continuous trough or three-trough hatch arrangement.)

d. Carefully position the tabs on the formed metal running board in line with the slots on the roof. Slide the running board (d) into place. You can secure it by applying a small amount of CA to the top of the vertical posts or to the bottom of the tabs inside the roof.

e. Now cement the roof to the body.

f. Cement the corner grabs (e) in place on the roofwalk with CA.

Step 3: Underbody

(a) Turn the car upside down on your work surface. Be sure to locate the "B" end of the car.

(b) Cement the two bolsters (f) in place. Be sure they fit snugly with the floor of the car.

(c) Carefully remove the trainline (g) from the sprue and cement it on the locator holes on the underside of the sill on the right side of the car.

(d) Install the gravity discharge outlets (h) on the underside of the hopper bottoms. Be sure to orient these as shown on the drawing and in the photo.

(e) If you wish to equip your car with gravity pneumatic outlets, add the pneumatic pip (i) to the discharge gates as shown. Note: There are no locating pins for the pneumatic discharge pip since we didn't want to compromise the appearance of the gravity gate itself. See the small photo for the proper position of this part.

Step 4: Brake Rigging

(a) Turn the car right side up and locate the B end of the car (the end with the mounting platform and extra holes).

(b) Install the brake cylinder (j) to the end of the car as shown. Note that the clevis and rod sit in the slot on the end of the car. The rod continues underneath the platform deck to the bolster.

(c) Install the brake reservoir (k) in the two holes centered between the angled braces on the end of the car.

(d) Install the triple valve (l) into the hole located in the platform deck. The longer of the two molded air lines should be positioned above the cylinder. Cement the end of this pipe in place between the back of the cylinder and the end of the car.

(e) Remove the two air lines (with 45 degree bends) from the sprue. There is a locator pin on the angled end of the part. Start with the longer piece (m) and cement the pin in place in the left hole of the reservoir. The other end of the pipe should just touch the face of the triple valve. Cement it in place. Repeat the process with the shorter angled pipe (n), this time cementing the pin into the right hole on the reservoir.

Step 5: Ends

There are several approaches to installing the ends to the car. While the individual assemblies are fairly delicate, the completed model has enough strength to survive service on most model railroads.

(a) Glue the end of the ladder brace (o) with the angled section to the notch on the side of angled end braces on the ends of the body. Repeat this procedure for the other end of the car.

(b) Carefully remove the ends (p & q) and side ladders (r) from the sprue. If there is any flash on these parts it's a good idea to carefully scrape the flash away BEFORE removing the parts.

(c) Cement the side ladders to the end ladders using the notches provided. Make sure the bolt detail is to the outside. The ladder rungs should be at a 90 degree angle to the end. Assemble both sets of end ladders and set them aside to dry.

