

Step 5: Roof And Running Board

After you have added weight to the car and insured that the weights are securely fastened, install the partially completed roof on the car. NOTE: On one end of the underside of the roof you will find a "B". This designates the brake end of the roof and insures that the hatches will be facing the correct direction when the roof is installed. When the roof is in place, glue the tops of the ladder assemblies to the car body at the points where they touch the ends of the roof.

It is recommended that you use either "Zap-A-Gap" or Silicon sealant to install the Running Board Grab Irons (I) and to fasten the Etched Metal Running Board (c) to the car. Install the running board grab irons and running board at this time. NOTE: Before installing the running board grab irons, position the running board on the car so that the grab irons, when installed, will be at the top of the tall end ladders. When installing the running board, please note that the "dividers" on the running board each fit over one of the running board supports on the roof. The running board is designed to be installed in only one direction.

Step 6: Trucks And Couplers.

Assemble the trucks and attach them to the car body using the screws provided. Place the couplers of your choice in the coupler boxes and hold them in place by press fitting the Coupler Box Covers (t) on the coupler boxes. You may wish to glue the covers on, but if you do, use glue sparingly so that the covers may be easily removed if you later want to replace the couplers.

You have now successfully completed the assembly of your HO scale ACF 2980 cubic foot centerflow two-bay hopper car. We wish you much enjoyment as you place it in service on your model railroad empire!! If you find that a part is missing or defective, or if you should break or lose one, please contact your dealer or write or call us at 1-800-472-2530 for a replacement.

THANK YOU FOR PURCHASING AN INTERMOUNTAIN KIT!!

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HO Scale ACF Centerflow 2-Bay Hopper

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 THE SPRUE. The most effective tools to use in removing parts from their sprue are with 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". In most cases the gates are designed to be trimmed completely flush with the parts. In the following cases the parts should be cut from their runner as close to the runner as possible as the locators are used as "gates" for molding the parts:

1. Both gates on Running Board Supports (f).
2. Gate to Brake Cylinder (p).
3. Two of the three gates to the Glad Hands (v).

Touch-up painting can be accomplished by using a small brush with lacquer thinner. Wet the brush in the lacquer thinner and lift a small amount of paint from the sprue runners and apply to the areas you wish to touch up.

It is very helpful to clean out all locator holes prior to test fitting parts. Sometimes a small amount of paint in the holes, or on the locators, makes it difficult to install the parts. When cleaning out the holes on the body of the car, do not core through the holes on the end platforms that are not already cored through. If the holes do not go all of the way through the platform, it is better to shorten the locators to make them fit.

RECOMMENDED TOOLS:

X-acto Knife	Fine Clippers	Tweezers	Small File or Emery Board
Magnifier		Pin Vise	Small Drill Set
Liquid Styrene Cement	“Zap-A-Gap” or Silicon		Small Phillips Screwdriver

ASSEMBLY INSTRUCTIONS:

Step 1: Roof

Test fit the Roof (b) to the Body (a), but do not glue in place at this time. Remove the Running Board Supports (f) from the parts sprue and install on the roof. Make sure the supports are straight and provide a level surface for installation of the running board.

Install the four Round Hatch Covers (h) on the roof, using the locators on the hatches and the locator holes on the roof. The round hatches are used predominantly on this prototype. Only use the Trough Hatch Covers (g) on the 2980 cubic foot two-bay hopper car if you have definite prototype information that indicates that particular car actually had trough type hatches.

Set the roof aside at this point to be installed later in the assembly sequence.

Step 2: Underbody Detail

Before installing these parts, clean the remaining portion of the sprue from the center of the underbody of the car using a chisel point X-acto knife or other appropriate tool. The paint on this area can be touched up using the method described above. Remove Hopper Discharge Gates (i) from the parts sprue and install on bottom of hoppers. Install Bolsters (x) in the same manner. **DO NOT CORE LOCATOR HOLES FOR BOLSTERS THROUGH THE PLATFORM.** It may be necessary to shorten bolster locator pins in order for bolster to sit flat on the underside of the platform.

Remove Air Line (n) from the parts sprue and carefully remove all gate material from the part. **DO NOT REMOVE THE FOUR LOCATOR PINS.** Install the air line using the four locator holes on the underside of the car body. It should not be necessary to clean out these locator holes. The air line, when in place, should sit about 1/16” from the surface of the car body.

Install the two Glad Hands (v) using the locator holes adjacent to the coupler boxes on each end of the body. **DO NOT CORE LOCATOR HOLES FOR GLAD HANDS THROUGH THE PLATFORM.** It may be necessary to adjust the length of the locators on the glad hands so that they will be the correct distance from the underside of the platform.

The correct roping staples for this car are the Short Roping Staples (m). Remove four of them from the parts sprue and install using the locator holes on the side sill just above the bolsters. Install four Sill Steps (k). Please note that there are right and left sill steps. Refer to drawing for correct placement.

Step 3: Brake And Ladder Detail

Install the Air Reservoir (q) on the brake end of the car. There are two locator holes in the center of the brake end of the car to accept the locators on the back of the air reservoir. Install Brake Cylinder Assembly (p) on brake end platform. Be sure to clean slot out carefully with an X-acto knife or thin emery board so that the clevis on the assembly easily fits into the slot. Glue the brake cylinder locator from inside the body, and glue the clevis rod to the underside of the platform. Install Triple Valve (u) and attached air lines using the locator on the bottom of the triple valve. The long angled air line crosses the platform and is glued to the body end brace just above the brake cylinder. Install the two Air Reservoir Lines (r) between the air reservoir and the triple valve being sure to locate the long line in the left locator hole in the air reservoir as you face the brake end of the car. When installed, the four air lines form a “cluster” as they meet at the triple valve.

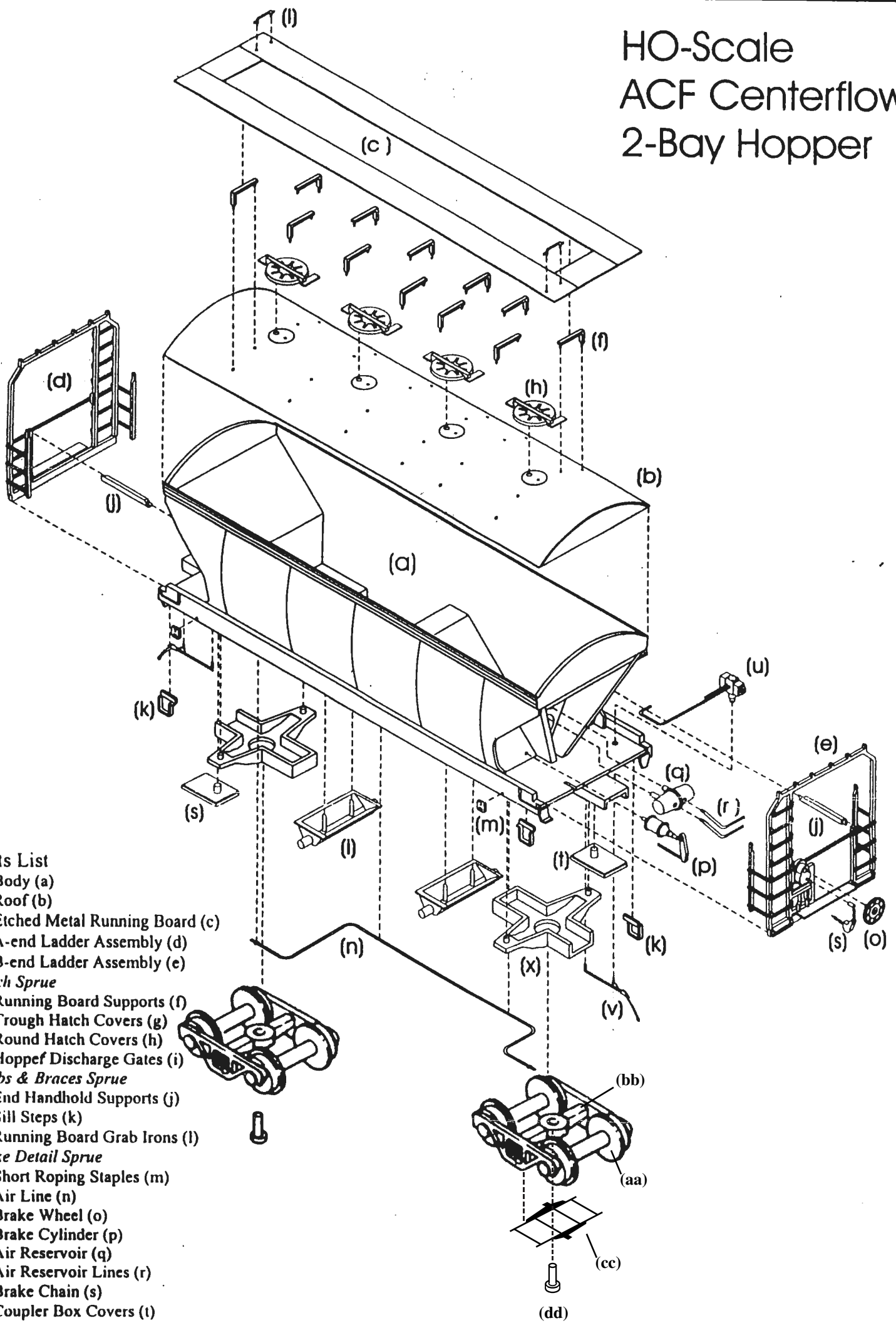
WHEN INSTALLING THE END LADDERS, DO NOT GLUE THE TOP OF THE LADDER TO THE BODY AT THIS TIME. WAIT UNTIL THE ROOF HAS BEEN INSTALLED. Install the A-end Ladder Assembly (d) on the end of the car away from the brake detail. The fit of this assembly is very snug, therefore it is necessary to carefully clean the “notches” in both lower corners of the assembly by scraping the surfaces slightly with an X-acto knife until they fit into the notches on the end platform. When installed, the assembly sits flush on the top of the coupler box. Install the B-end Ladder Assembly (e) in the same manner. The last two pieces of end detail to install are the End Handhold Supports (j), one on each end of the car. If you haven't already cleaned out the locator holes for these two parts, do so now. Notice the beveled surface on the locator end of the support that matches the contour of the end slope sheet. The other end of the support is notched to mate with the end ladder assembly just above the top short ladder rung.

Remove Brake Chain (s) carefully from the parts sprue and install using locator hole just below and to the right of the brake wheel locator hole. Install Brake Wheel (o). Adjust length of brake wheel locator pin as needed.

Step 4: Weighting Of Car

Now is the appropriate time to add weight to your car. In order to bring the total car weight up to NIMRA standard, it is recommended that you add two ounces of weight to this car.

HO-Scale ACF Centerflow 2-Bay Hopper



Parts List

- Body (a)
- Roof (b)
- Etched Metal Running Board (c)
- A-end Ladder Assembly (d)
- B-end Ladder Assembly (e)

Hatch Sprue

- Running Board Supports (f)
- Trough Hatch Covers (g)
- Round Hatch Covers (h)
- Hopper Discharge Gates (i)

Grabs & Braces Sprue

- End Handhold Supports (j)
- Sill Steps (k)
- Running Board Grab Irons (l)

Brake Detail Sprue

- Short Roping Staples (m)
- Air Line (n)
- Brake Wheel (o)
- Brake Cylinder (p)
- Air Reservoir (q)
- Air Reservoir Lines (r)
- Brake Chain (s)
- Coupler Box Covers (t)
- Triple Valve (u)
- Sill Steps (k)
- Glad Hands (v)

Bolster Sprue

- Long Roping Staples (w)
- Bolsters (x)

Barber S-2 Truck Package

- 36" Wheel Sets (aa)
- Truck Frames (bb)
- Brake Beams (cc)
- Screws (dd)