

e. Safety Placard Brackets (v). Place the four brackets in the appropriate positions on the underframe. The two on the sides have locator mounts just inside the walkway under the left side of the dome and the two on the ends are mounted in locator holes on the top of each of the coupler boxes.

f. Sill Steps (p). The four sill steps are mounted in locator holes provided on the bottom of each corner of the underframe.

g. Brake Mast (r) and Brake Wheel (t). Remove the brake mast and brake wheel from the parts sprue and clean off any remaining portion of the gates where they were attached to the runner. There are three locator holes in the cross pieces on the ends of the underframe, one on one end and two on the other. One of the locator holes is slightly further from the coupler box than the other two. Insert the brake mast from the bottom of the underframe into this locator hole and place the free end of the "L-shaped" bracket on the end of the mast on the mounting support next to the coupler box. The other, short, end of the bracket will then rest on the bottom of the underframe. Glue lightly in place. When the glue holding the mast in place has dried, glue the brake wheel into position on top of the mast placing the top of the mast into the locator hole on the underside of the brake wheel.

h. Drain Cap (x). Fasten the drain cap in place on the end of the drain protruding through the hole in the bottom of the underframe.

i. Hand Rail (z). Carefully remove the hand rail from its runner. The ten long locators should be left as long as possible. The eight short gates should be carefully trimmed from the hand rail. The side locators are at a slight angle and should be pointing down when the hand rail is installed on the main section of the car body. The two end locators must be put into place first, then the eight side locators.

j. Ladders (n). After removing the two ladders from the parts sprue, trim the top locators (on the end away from the seating brackets) so that they are short enough to fit into the mounting brackets on the hand rail. Attach the bottom of the ladders to the walkway and glue in place, then repeat this procedure with the top of the ladders to the hand rail. If necessary, the locator holes in the walkway and the fittings on the hand rail may be opened up slightly with a small drill.

#### Step 4: Trucks and Couplers

a. Couplers. Mount the couplers of your choice in the coupler boxes and glue Coupler Box Cover (f) in place. (InterMountain fully automatic couplers are recommended.)

b. Trucks. Remove Sideframes (j), Bolsters (k), and Brake Beam Assemblies (l) 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 (aa) and mount trucks on car body using the Retaining Screws (bb) provided.

## INTERMOUNTAIN RAILWAY COMPANY

P.O. Box 839, Longmont, Colorado 80502

Phone: (800) 472-2530 Fax: (303) 772-8534

E-Mail: [intermountain@intermountain-railway.com](mailto:intermountain@intermountain-railway.com)

Web Site: [www.intermountain-railway.com](http://www.intermountain-railway.com)

### HO Scale ACF Type 27 Riveted 10,000 or 8,000 Gallon Tank Car

#### PARTS LIST

- |                                       |                                |
|---------------------------------------|--------------------------------|
| 1. Tank Car Body - Main Section (a)   | 8. Detail Sprue:               |
| 2. Tank Car Body - Bottom Section (b) | (4) Tank Mount and Band (m)    |
| 3. Tank Car Dome (c)                  | (2) Ladder (n)                 |
| 4. Running Board With Underframe (d)  | (5) Dome Platform Bracket (o)  |
| 5. Underframe Lower Cover Sprue:      | (6) Sill Step (p)              |
| (1) Underframe Cover (e)              | (6) End Grab Iron (q)          |
| (2) Coupler Box Lid (f)               | (1) Brake Mast (r)             |
| 6. Tank Car Dome Detail Sprue:        | (6) Tank Grab Iron (s)         |
| (2) Safety Valve (g)                  | (1) Brake Wheel (t)            |
| (1) Manhole Cover (h)                 | (2) Dome Platform (u)          |
| (2) Dome Grab Iron (i)                | (4) Safety Placard Bracket (v) |
| 7. Truck Sprue:                       | (2) Glad Hand (w)              |
| (4) Sideframe (j)                     | (1) Drain Cap (x)              |
| (2) Bolster (k)                       | (1) Triple Valve (y)           |
| (2) Brake Beam Assembly (l)           | 9. Hand Rail With Fittings (z) |
|                                       | 10. Wheel Pack:                |
|                                       | (4) Wheelset (aa)              |
|                                       | (2) Retaining Screw (bb)       |

#### RECOMMENDED TOOLS:

X-acto Knife	Fine Clippers	Small File or Emery Board	Pin Vise
Small Drill Set	Liquid Styrene Cement	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, an X-acto knife, or a sharp single-edged razor blade. DO NOT ATTEMPT TO BEND, TWIST, OR BREAK THE PARTS FROM THE SPRUE!!

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. Small amounts of glue are needed to affix styrene plastic. It is often helpful to clean out the locator holes with a #73 drill bit. Also, holes may be drilled through many of the parts, such as the body, so that the glue may be applied from the inside.

### ASSEMBLY INSTRUCTIONS:

Please note that the assembly instructions for the 8,000 gallon HO riveted tank car are exactly the same as the assembly instructions for the 10,000 gallon HO riveted tank car. There are, however, some additional parts that have been added to the parts sprue for use on both models. Install them at the appropriate step in the assembly process, in other words, where it best works for you.

#### (cc) Dome Platform Grab Iron - 4

You will only use two of these grab irons. We have included a couple of extras in case of loss or damage. The locators on these grab irons are to be glued into the locator holes on the bottom side of the two platforms, one on either side of the dome at the top of the ladder.

Side and End Grab Irons - The instructions explain the installation of the grab irons on the ends of the walkway. We have added 4 grab irons of the same design that may be installed on the sides of the walkway. Due to the complexities of molding the parts, there are no locator holes on the walkway for these grab irons. If you choose to install them it will be necessary to drill locator holes to accept the locators. The grab irons are properly located just above the stirrups at the four corners of the walkway, spaced equidistant between the stirrup and the top of the walkway. It is recommended that you use a #73 or #74 drill for preparation of the locator holes.

#### Step 1: Tank Car Body, Dome (c), and Dome Details

a. Insert the dome into the Tank Car Body - Main Section (a) using the locator pin on the bottom of the dome and the locator hole in the dome recess on the body. Glue in place.

b. Dome Details. Glue the two Safety Valves (g) in place in the two small holes in the top of the dome. Glue the Manhole Cover (h) in place in the larger hole in the top of the dome being sure to position the hinge in the center of the side away from the safety valves. Fasten the Dome Grab Irons (i), one on each side of the dome, using the locator holes provided. Lightly press the grab irons into the holes. They are slightly angled to "seat" the proper distance from the dome surface.

NOTE: Hand Rail (z). In order to be able to glue the hand rail from inside the body, it must be installed now, therefore go to step 3 (i). If you want to glue from outside the body, you may install the hand rail in the normal sequence.

c. Weight. It is recommended that two ounces of weight be added to this car. It should be placed in the bottom section of the car body before going to the next step.

d. Tank Car Body - Bottom Section (b). After weighting, glue in place using a small amount of glue along each side and end. (Due to the snug fit of these pieces, it may not be necessary to glue the bottom section of the tank car body to the main section. Use your discretion based on your use of this model.) Bottom section may be installed in either direction.

e. Tank Mounts and Bands (m). Prepare the four tank mounts and bands by removing from the sprue. Remove the two locator pins from the bottom of each mount. They are not necessary in positioning the tank on the underframe. The short section of the band on these parts is a continuation of the bands around the tank near each end. Using a small amount of glue on the locators, attach the tank mounts and bands to the car body by placing the long locator on the inside of the mount into its locator hole. Then carefully push up on the mount until the short locator on the end of the band slips into place.

#### Step 2: Underframe With Running Boards (d)

a. Fasten the two pieces of the underframe together using a small amount of glue on the underside of the bolsters on the underframe cover (e). The elongated holes in the center of the two pieces must be aligned.

b. Glue the Triple Valve (y) in place placing the locator pin in the hole in the top of the air tank. The "protrusion" on the side of the triple valve should face to the outside of the car.

c. Fasten the tank car body to the underframe using the two locators on the mounting pads on each end of the bottom of the tank. When positioning the tank on the underframe, be sure that the drain on the bottom of the tank protrudes through the elongated hole in the underframe. The tank mounts then locate on the bolsters. Use a small amount of glue to fasten the mounting pads and the tank mounts to the frame.

#### Step 3: Body Details

a. End Grab Iron (q). Attach the four end grab irons using the locator holes on the ends of the underframe.

b. Tank Grab Iron (s). These are the strange-shaped grab irons that look like they have been mashed on the sprue. The locators are malformed so that they will fit into the angled locator holes in the four corners of the tank. Place the straighter of the two locators in the upper hole and the lower locators will slip easily into place. Press lightly toward the tank and they will locate the correct distance from the tank surface.

c. Dome Platform (u) and Dome Platform Brackets (o). Glue the dome platform brackets in place, two on each side of the tank just below the dome. The brackets on first glance appear to be symmetrical, but they are not. The "long" side of the bracket goes to the top of the car so that the top bracket surface will be horizontal to accept the dome platform when glued in place.

d. Glad Hands (w). The glad hands are attached using the locator hole just to the left of the coupler box when looking at the bottom of the underframe. The inside end of the air line should be lightly glued to the underside of the bolster.

# ACF Type 27 Riveted 10,000 or 8,000 Gallon Tank Car

