

MAC-821
"Long" Type Ballast
Doors

MAC Rail LLC
Model Train Products & Services



Thank you purchasing our MAC-821 Herzog "Long" Ballast Doors kit. This kit is specifically designed for use with Athearn High Side Thrall gondola and requires physical car modifications. Doors are painted a primer red to match the brown Herzog scheme found with the prototype. Using weather techniques the two can be blended and not require further painting.

Our kits are designed to minimize benchwork time and providing a prototype look. Enjoy the build!

- MAC

STEP 1 – OPENING YOUR KIT

When opening your kit, you will find the following parts:

(4) “Long” Type Ballast Doors

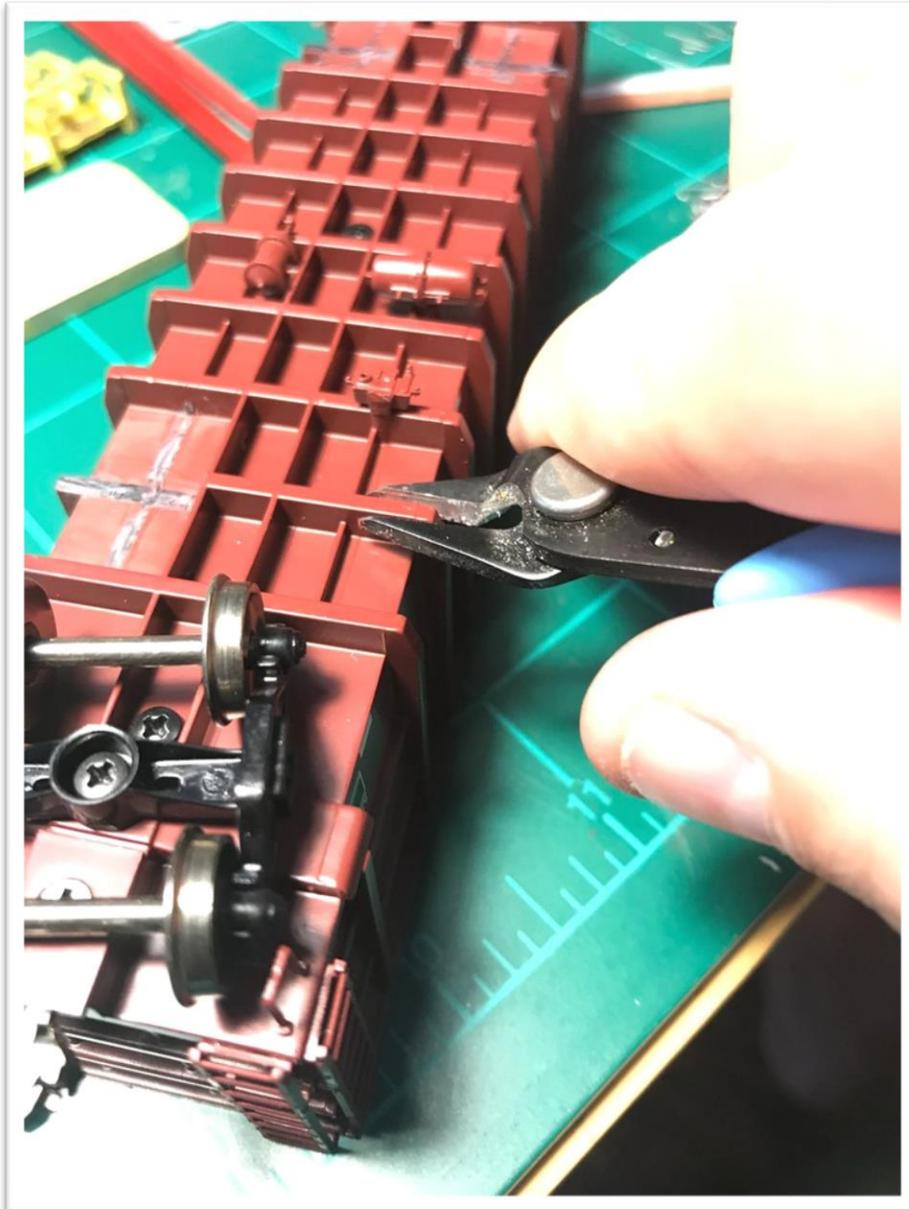
TOOLS FOR INSTALL:

- Safety glasses (cutting)
- Mask (sanding)
- CA Glue
- MAC-821 kit
- Hobby Knife
- Ruler
- Sprue flush type cutter tool
- Sanding Stick / Sandpaper
- Athearn RTR Thrall Ballast Hopper

STEP 2 – UNDERSIDE RIB REMOVAL

Start by turning car upside down on work surface and cutting out the 2nd and 9th underbody ribs. Using the cutter, take small bites at the plastic until the area is flush with underside of car (Left side of photo).

Repeat Step 2 for the other three corners



STEP 3 – SANDING

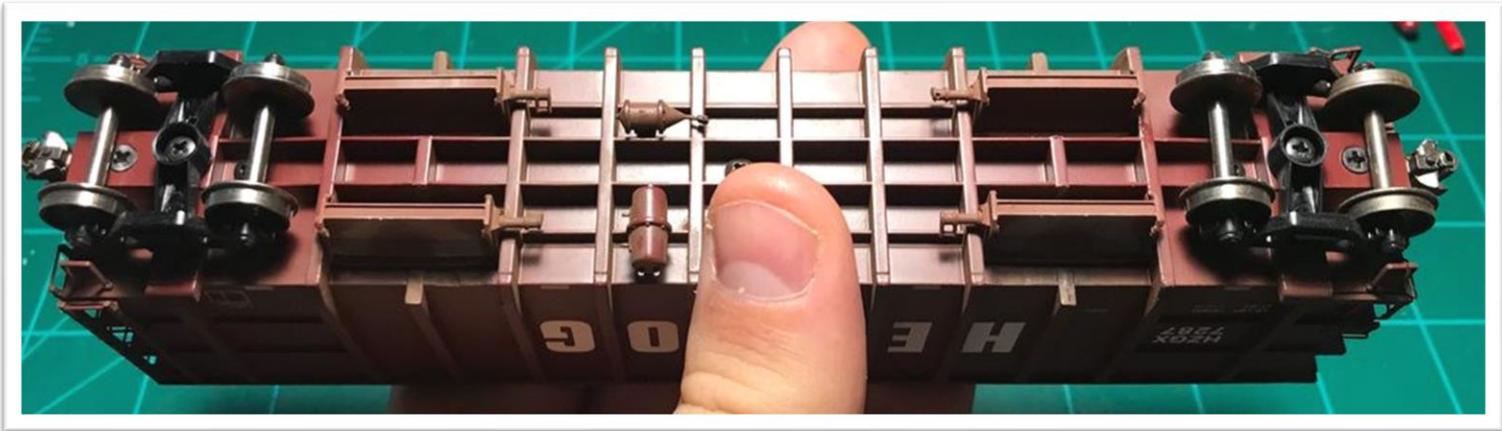
Once all of the removal has been complete, use your preferred sanding method to clean off the surface ensuring you have a level area to install the ballast door.



STEP 4 – DOOR ORIENTATION & INSTALL

From the package the four ballast doors are painted in a red primer to closely match the brown "HERZOG" scheme offered by Athearn. As you are installing the gates, pay careful attention that the levers are facing inwards and towards the car center. (I did it right on the left side and wrong on the right side)... But they are all facing inwards so that is a plus!

Apply CA to bottom of gates which is not painted with a toothpick and press into place.



STEP 5 - WEATHER

Once CA has dried you can then proceed to weather the gates blending them into the car to match desired level of weathering. In this example I used Pan Pastels to weather the doors and "dust" the car

