

**MAC-809**  
Herzog Solar Panels

**MAC Rail** LLC.  
Model Train Products & Services



Thank you purchasing our MAC-809 Herzog Ballast Car Solar Panel Kit. This kit can be used with any ballast hopper, however for this install we will be using the Athearn RTR Ballast Hopper.

Reviewing prototype information we found Herzog has many different types of ballast cars around the North American system. While many different cars exist in their fleet, a common installation found is the top mounted "Top Hat" type solar panels. This install process can be used on any of their cars, refer to prototype photos for more specific information.

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:

- (2) Top Mount Solar Panels & Decals
- (2) Side Solar Panels & Decals
- (2) Styrene pieces for top mount install

Tools needed:

- Safety glasses
- CA Glue
- MAC-809 kit
- Hobby Knife
- Ruler
- Sanding Stick / Sandpaper



## STEP 2 – PREP

The underside of the Herzog "Top" solar panel is very delicate and care should be taken when installing. The large rectangle section allows for a solid surface when gluing to railcar no matter which orientation you choose based on prototype.



### STEP 3A – INSTALL

Depending on your preference you can add decals to solar panel structure before or after installation. The aluminum painted structure has a semi-gloss coat making it ready for decals using your preferred method.

Using a toothpick apply CA to the corner of the car. The panel does not rest on the top of the side sill, but does sit right on top of the end sill.



### STEP 3B – INSTALL

Place solar panel structure either parallel or perpendicular to railcar based on prototype you are modeling. If modeling parallel style the rectangle portion on underside of solar panel structure rests right on top of end sill. The panel is parallel and flush with side sill but does not rest on it.

If installing perpendicular, solar panel is centered on the end sill. The solar panel structure is kept to the inside of the railcar and does not overhang the sides.

Refer to prototype photos as reference.

