

**MAC-801/802**  
CSXT Type Solar Panels

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



Thank you purchasing our MAC-801/802 CSXT Type 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 CSXT has three different styles of solar panel setups on their ballast cars. The first two can be modeled by our 801 and 802 kits with the only difference between the angle bracket being a open frame or closed plate like in photo above. These cars consists of four solar panels with two on each end on top and two on the side above the numbers. Refer to prototype photos for more specific placement and weathering.

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:

Hobby Knife

Straight Edge

Silver Sharpie Marker or paint

Gel type CA

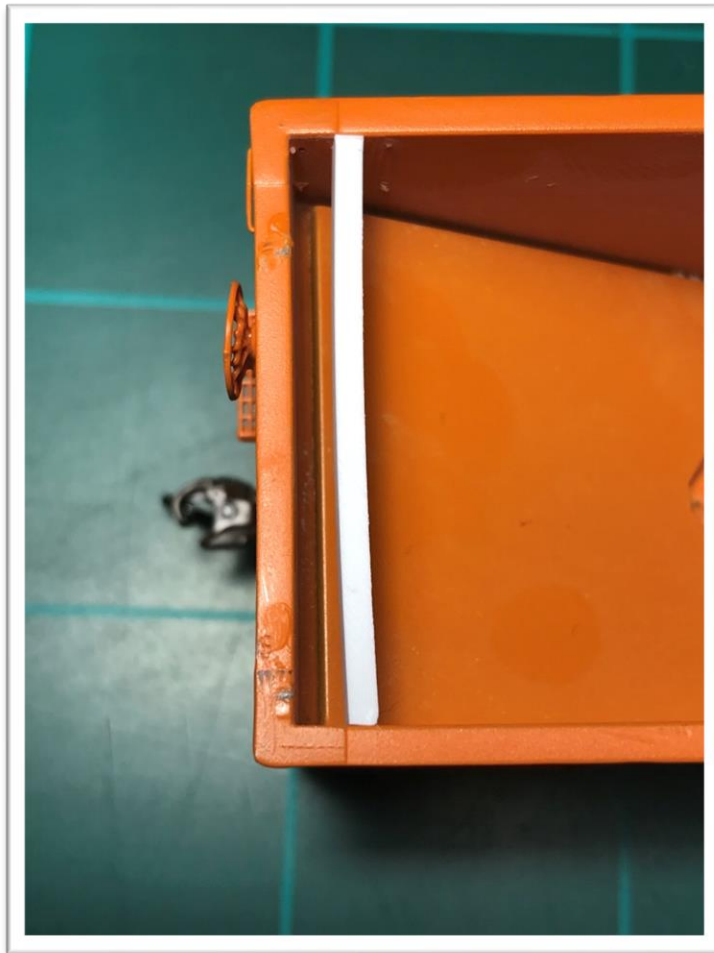
Preferred decal setting solution



## STEP 2 – END SUPPORT INSTALL

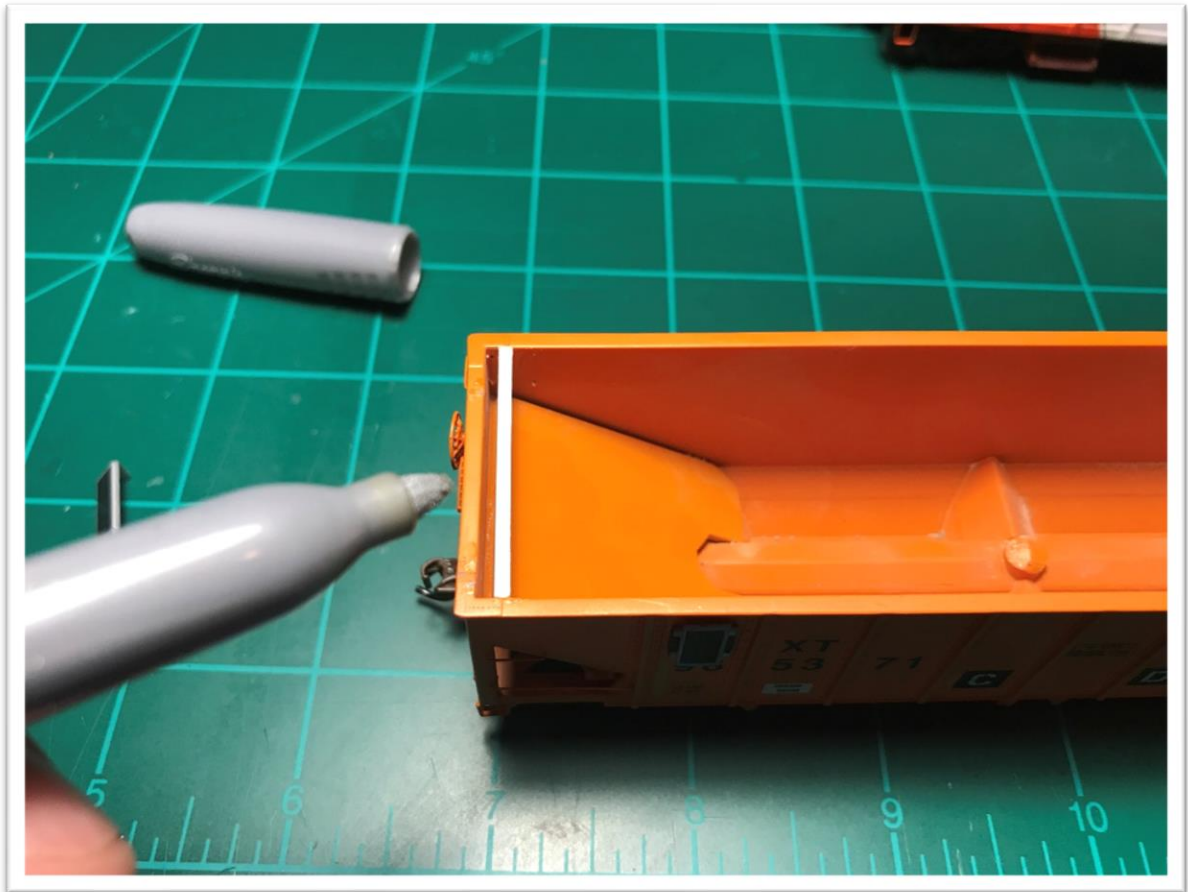
MAC-901 and MAC-902 kits come with pre-cut styrene that should fit snug on the end of the 40' Athearn RTR Ballast Cars.

Line up the styrene piece to the INSIDE of the molded on corner bracket as shown in photo. Once you are comfortable with the fit go ahead and glue in place. This support piece will be what the back part of the solar panel bracket will rest on. In this photo you can see the styrene is warped and needs to be trimmed to fit snug but not forced.



### STEP 3 – ADDING COLOR

Once installed I like to keep things simple and use a silver permanent marker to color the piece of styrene. It dries rather quick allowing you to complete multiple kits during an afternoon at the workbench. If you prefer to paint with brush, go for it.



## STEP 4 – INSTALLING PANELS

Taking the decals supplied with your MAC-901 or MAC-902 you can go ahead and install following your preferred decal application method. The solar panel structure is coated in semi-gloss making it decal ready. The center groove in the panel lines up with the white line separating the sides of the solar panel.

Once decal applied you can then install onto railcar. Using the car side sill as reference center the structure on the end sill of the car and on support beam. There are three brackets that will glue to car. The solar panel should be flush up against the top of the side sill but not on it.

TIP: If you decide to decal before putting on railcar, use some two-sided tape or rolled painters tape to hold the solar panel structure in place while you apply the decal. Alternatively, you can install the structure on the railcar then add decal once glue is dry. Seal with dullcote to protect decal.

