

# TrainCat Model Sales

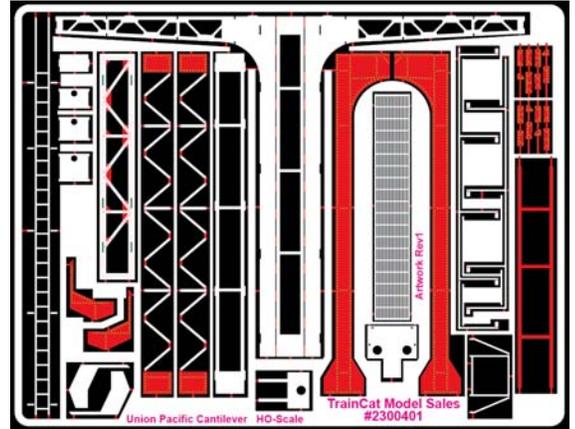
## Union Pacific Cantilevered Signal Bridge N-Scale & HO-Scale

### Before Starting

**PREPARING BRASS** The easiest way to remove the brass parts from the sheet they are produced on, is to use rail nippers. The brass is soft and won't affect their future cutting ability. This will reduce or eliminate the amount of filing to smooth the edge. The next best way is with small sharp diagonal cutters that will fit into the small areas between the part and the sheet holding them. *You should always use a file to remove the balance of the tie. This will ensure a perfect fit.*

**GLUING BRASS** Instant super glues, Cyanoacrylate, CA for short, are very prominent in model building today. They will work perfectly with brass, and they are instant. We recommend a thick CA glue such as “Zap-A-Gap” from Pacer Technology. As I have also been building R/C airplanes for over 33 years, I have many airplanes built entirely with CA glue and I can tell you that the wood will break before the glue joint. So it is great stuff! Besides being almost instant, thick CA glues will help create a small fillet and fill small gaps when applied to the inside of joints. Using a toothpick to apply the CA glue works really well for getting the glue into the interior areas and controlling the amount of glue used.

**PAINTING BRASS** Wash your completed assembly in warm soapy water. If it is really messed up with flux etc. you can clean it with a lacquer thinner first. *Do NOT bake the model if you used CA glue for construction.* Baking will set the paint to the brass as well as allowing you to paint over parts of it without the first coat dissolving as you spread on the second coat. One nice thing about painting on brass, if you don't like the paint job you can use paint remover to get rid of it and start again without hurting the brass.

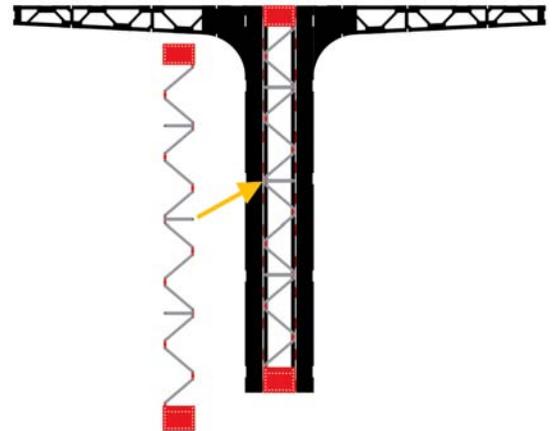


### Step #1 – Attach Side Detail Overlay

Remove the main body from the kit sprue, be sure to remove all remnants of the attachment ties. It is better to attach the center Gussets and X-Bracing before bending of the body.

Remove all gusset plates from the kit sprue and clean-up all attachment tabs. Gussets for the Left Side are on the left side of the Kit Sprue

Place the Main Body on the workbench with the etched bend lines facing DOWN. Use the image to determine the proper location. Secure by either solder or CA method from the inside.

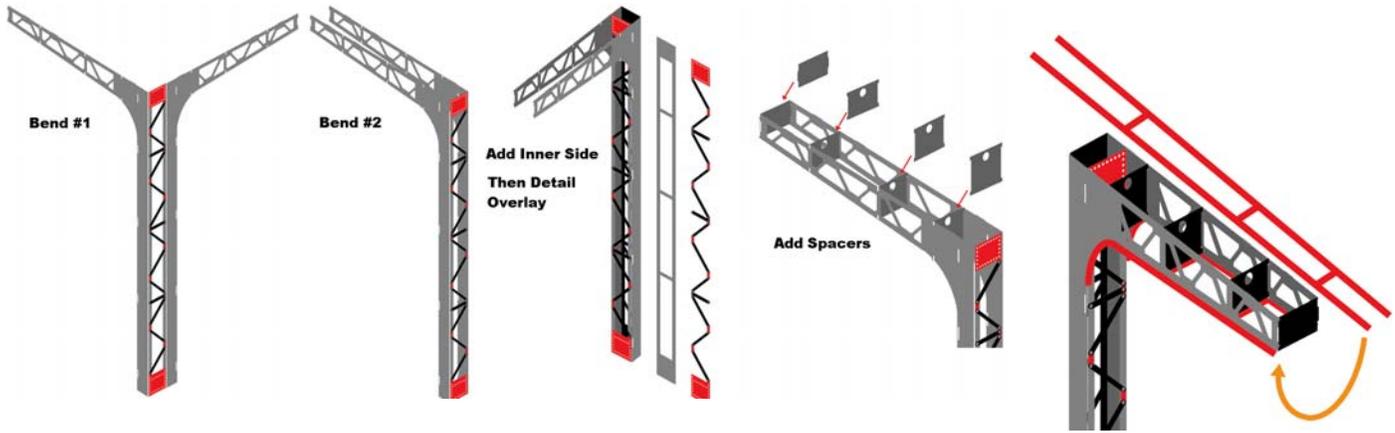


### Step #2 – Building the Main Body

If you have never bent brass before, TMS recommends using an inexpensive bending tool. Check our website for more details. All of the fold locations are open with small tabs connecting the pieces to be folded. The builder should take note that these tabs have a line etched in them halfway through the tab on one side. The builder should make the bend so that the half-etched line is on the inside of the bend.

The first fold will be between the left side and the outer center column. Create a 90 degree bend. Secondly, bend the right side between the center column and the right side.

Add the Inner Side to the frame placing the tabs of the inner side into the notches of the cantilevered sides. Secure by either solder or glue. Take a few moments and file off any protruding remnants of the alignment tabs. A jewelers file works best for this. Add the Detail Overlay over the Inner Side.



Each of the four arm Spacers have tabs that will interlock with slots in the arm. Add the Spacers starting with the largest working out to the end Spacer. Secure by either solder or glue. Again, file off any protruding remnants of the alignment tabs.

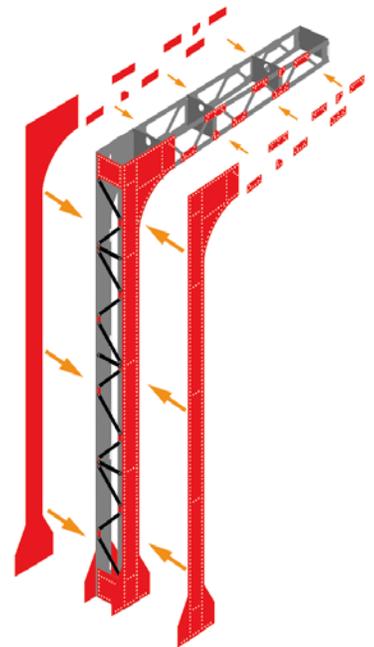
The Lower Flange is half-etched so it will bend easily and conform to the curve on the arm. Test fit the Lower Flange to ensure the cross-connects align with the bottom of the Spacers. Start at the arm end and work to the arm curve. Secure by either solder or glue.

### Step #3 – Adding Details

Lay the frame down on the building surface on one side. Remove the appropriate large Detail Overlay from the kit sprue and remove all tie remnants. Start at the top securing the Overlay to the frame and work towards the bottom.

Remove the small Gusset Overlays from the kit sprue and remove all tie remnants. Add each Gusset Overlay securing with either glue or solder.

When finished, turn the frame over and add the Detail Overlays to the opposite side.



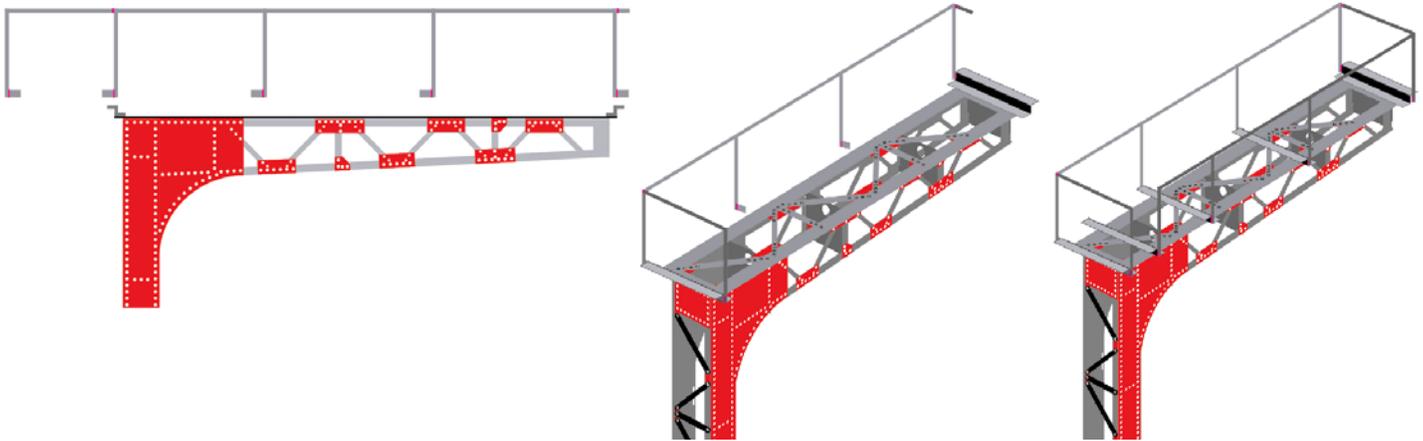
### Step #4 – Adding the Deck Base

The Cantilevered Arms have three tabs each on the top side. Two towards the end, and one towards the vertical post.

The Deck Base has corresponding half-etched slots on the bottom. Align the slots & tabs and secure the Deck Base to the Cantilevered Arm



## Step #5 – Adding the Railings



Remove the Railings from the kit sprue. Remove all remnants of the attachment ties. Cut the provided “Z” bar into 5 lengths of 15/32 inch. Do NOT exceed 1/2 inch. Secure a length of “Z” bar to the ends of the Deck Base facing outward as in the first image.

Take the long railing, locate the half-etched bend lines and bend the attachment pads on the bend line. Remember, the bend line goes on the inside of the bend. Attach Railing pads to the “Z” bar as shown in the first figure.

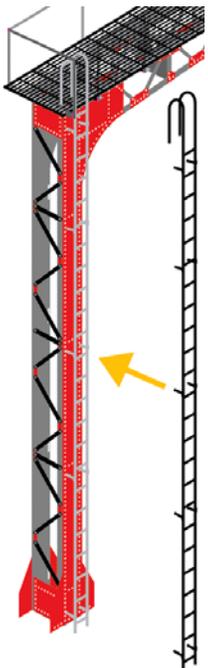
Using the bend line on the Railing, bend the Railing on the vertical post end around and secure to the other side of the left “Z” bar. See the second figure.

Secure two more “Z” bars to the Deck Base at the locations of the middle Railing stanchions. Secure the pads to the two middle “Z” bars. Bend the small Railing end as shown. This section will be used with the other Railing to join them together.

Bend the attachment pads on the short Railing. Secure the Railing to the “Z” bar at the Cantilever Arm end. Secure the attachment pads to the two middle “Z” bars. Bend the Railing at the bend line and join the two Railings sections together at the Cantilever Arm end. Using the unattached Railing stanchion as a guide, secure the last “Z” bar to the Deck Base then secure the final Railing stanchion to the “Z” bar.

## Step #6 – Adding the Deck Grating and Ladder

Remove the Deck Grating from the kit sprue. Remove all remnants of the attachment ties. Place the Deck Grating between the Railings on the “Z” bars. Secure the Deck Grating to the “Z” Bars.

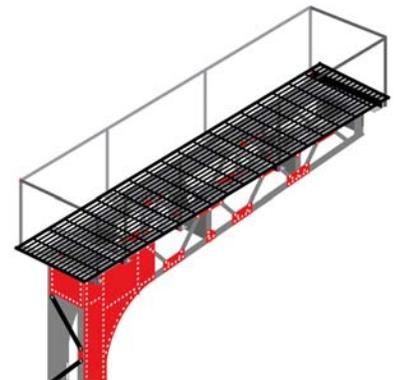


Place the assembly on the workbench orientated so the vertical column is on the left and the cantilevered arm points to the right. This is the side that you should attach the Ladder.

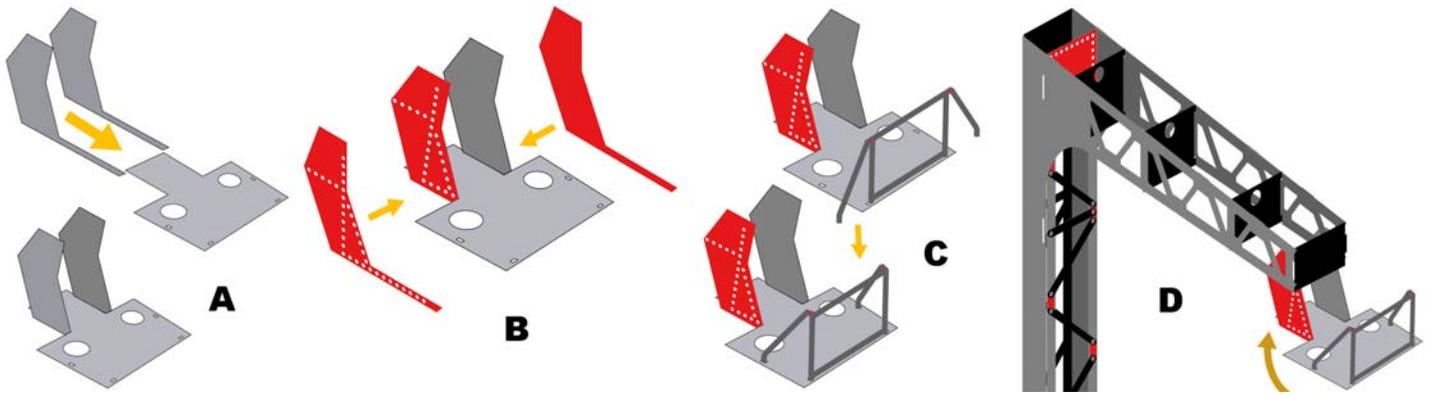
Remove the Ladder from the kit sprue. Clean-up all remnants of the attachment ties. Place the assembly on the workbench orientated so the vertical column is on the right and the cantilevered arm points to the left.

Bend the Ladder attachment arms 90 degrees. The Ladder is designed to be attached to the vertical column at the opening in the Railing.

Place the bottom of the Ladder at the bottom of the vertical column. Secure the longer ladder attachment at the bottom of the vertical column followed by the middle attachments and finally the attachments for the top of the ladder. Now bend the remaining ladder stock 180 degrees attaching it to the Grated Deck as shown.



## Step #7 – Building Optional End Platform



Included with your kit is the optional End Platform that was found on some UP Cantilevers. Begin by removing the Platform, Supports, Support Overlays and Platform Railing. Clean-up all remnants of the attachment ties.

Secure the Platform to the Supports as Shown in figure A. Secure the Detail Overlays onto the Supports as in figure B. Attach Railing to Platform. Bend railing and secure as shown in C. Install Platform to the back of the end Spacer.

## Step #8 – Building the Signal Heads

The Signal Heads are provided as a convenience to the modeler. The structure for working signals are included, but the electronics are not provided and are left to the modeler to accomplish. Begin by deciding which Heads are to be installed on the cantilever. Remove these from the kit sprue and remove all remnants of the ties. Also remove the appropriate number of Sun Shields from the sprue and remove all remnants of the ties.

Using the provided 3/32" tubing, form the Sun Shield into a curve. Place the curved Shield in the curved slot on the Signal Head. Ensure that the shield is perpendicular to the signal head and secure using either glue or solder. Repeat for all shields required.

Remove all tie remnants from the Head Attachment Brackets that were removed from the centers of the Body's vertical columns in the first step. The flat end of the Attachment Bracket will go into the half-etched slot on the rear of the Signal Head. Secure two Attachment Brackets to each Signal Head ensuring that the two post holes are aligned and vertical to the Head.

Cut a length of the provided 3/32" tubing as required to mount the Signal Heads. Also remove all tie remnants from the Signal Pole Bracket. Fold the Bracket sides on the etched fold lines and attach to Cantilever in desired location. Secure Heads to Signal Pole and then the Signal Pole to the Pole Bracket.

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