

### 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.



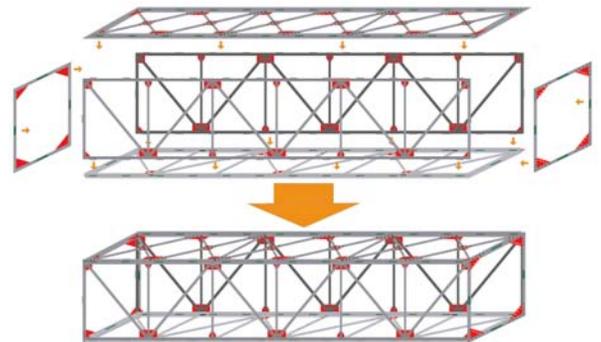
### Step #1 – Build The Bridge Frame

The builder should remove the two Sides, the two End Frames, the Top Frame and Bottom Frame. Clean-up all remnants of the attachment ties.

Identify the Top Frame, it has the slots etched all the way thru for the Railings. Place the Bottom Frame on the building surface with the etched rivet detail facing down and half-etched slots up.

Secure a Side to the Bottom Frame placing the tabs of the Side into the slots of the Bottom Frame. The diagonal end brace of the Side should point up and outward and the rivet detail outward. Ensure the Side is perpendicular to the Bottom Frame. When finished, Secure the other Side to the Bottom Frame.

Secure the Top Frame to the Sides ensuring the Side tabs are in the half-etched slots on the Top Frame. There are tabs on the ends of both Sides, Top & Bottom Frames. The End Frames have half-etched notches in them allowing the End Frames to be easily secured to the Bridge Frame. Secure them now.



### Step #2 – Build The End Bents

The builder should remove the two End Stands, the four Side Braces and the Top Brace from the kit sprue. Clean-up all remnants of the attachment ties. Begin by securing a Side Brace to the End Stand starting at the bottom. The tabs of the Stand go into the half-etched slots of the Brace. The Curved Supports will be the inner side of the Bent. Add the Top Brace to the Bent ensuring that the two slots go to the outside of the Bent.

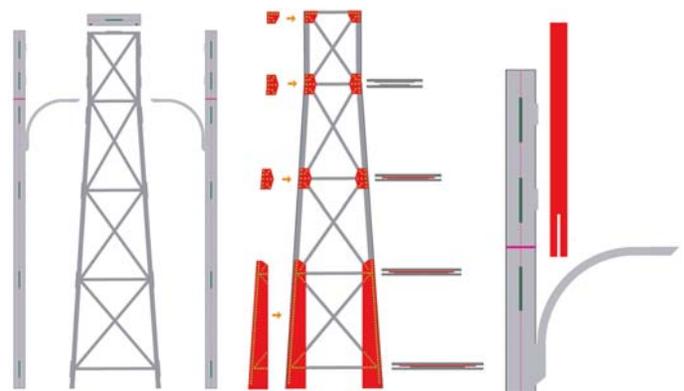
The next step is to add the first layer of details. These are the gusset overlays at the junction of bracing on the outer side starting at the bottom of the Bent. Refer to Step #4 as this section uses Detail Overlays C, D, E and F.

The second layer of details is the Horizontal Stiffeners. Please take note that there are four different sizes required for each stand. Each Horizontal Stiffener has end slots that allow it to fit into the Gusset Plates and Stand Frame. The Stiffener also has a half-etched line on the top Stiffener. Be sure to orientate the Stiffener correctly during assembly.

The Stiffener will have to be lightly bowed to be able to fit it in the opening of the Stand Frame. Insert the Stiffener into the Stand Frame making sure the end slots are fully engaged. Carefully bend the Stiffener back to being flat and ensure the Frame tab is in the Stiffener slot. Secure the Stiffener to the Frame

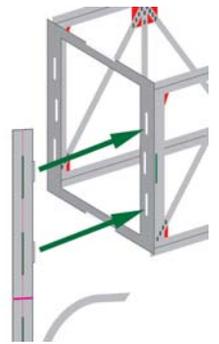
Slide the Curved Support Top so the Curved Support is fully engaged into the slot. Do not bend the Top yet!. Before bending, secure the Fingers of the Top to the Curved Support Base. Once secure, bend the top over the Curved Support securing as you go.

Secure the Bolt Plate to the bottom of the Bent and then secure the Support Gusset to the outer Side Brace at the Bolt Plate. Repeat for the other Bent.

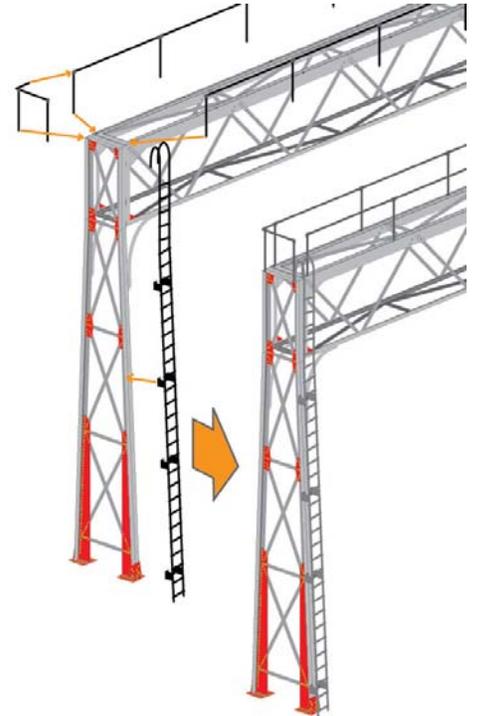
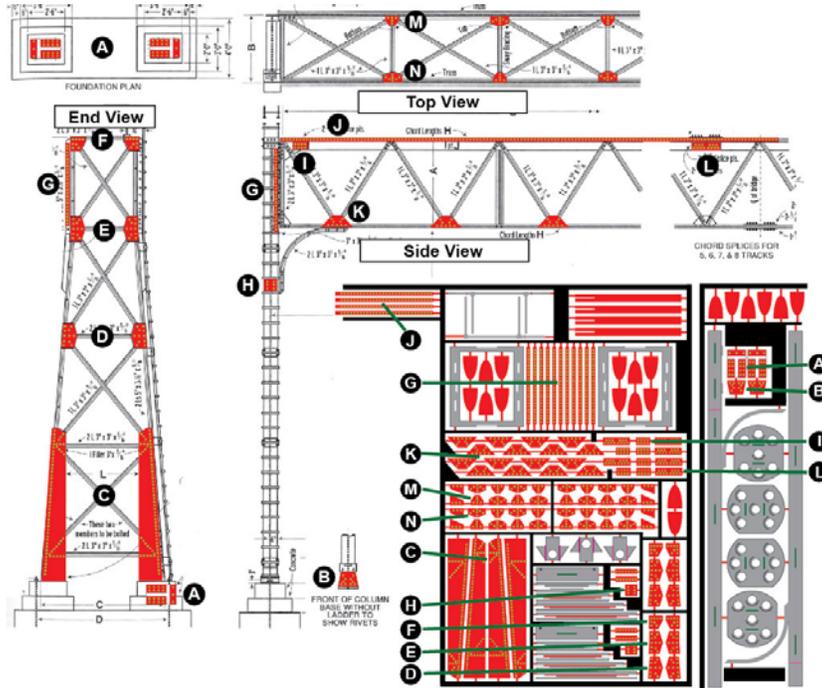


### Step #3 – Attaching the Bent to the Bridge Frame

At the top of the Side Bent, each Side Brace has two tabs on the inner side. These tabs will engage the corresponding slots in the Bridge Frame End piece. It is best to make a small “Tack” using glue or solder on both End Bents and align the bents so that both will rest on a flat surface. Once satisfied, fully secure the End Bents to the Bridge Frame. Secure the Curved Supports of the End Bent to the underside of the Bridge Frame.



### Step #4 – Adding Detail Overlays, Ladders & Railings



The builder should reference the image above to see where each of the Detail Overlays are to be placed onto the model. A locator is also shown to help the builder find the overlays on the kit sprue. It is advisable for the user to add the details by the alphabet. Detail C, D, F and F already had to be installed to properly build the End Bents.

The Ladder is one piece and has standoffs that require bending. The standoffs have two half-etched bend lines on what is to be the inner side of the Ladder. Bend the Standoff 90 degrees to the Ladder and then bend the attachment tab another 90 degrees. Position the ladder to the side of the End Bent with the Ladder at the Bent bottom. Secure each attachment tab starting at the bottom and working up. Bent the Ladder end 180 degrees to create the loop as shown. Secure the Ladder end to the signal bridge top.

Secure the Railings one at a time to the signal bridge top. Place the vertical stanchion in the matching slot and secure. The end railings have extra pieces allowing them to be bent and secured to the long side Railings

### Step #5 – 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 bridge. Remove these and the appropriate number of Sun Shields from the kit 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. Signal Heads that are to be mounted between the Upper and Lower Platform are not to be attached to the Mast until final assembly. Mount all other Signal Heads (if any) to the Mast.

