

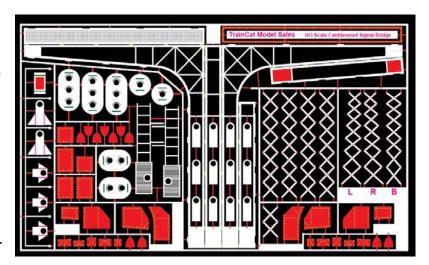
C&O / B&O / SOU Cantilevered Signal Bridge

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.

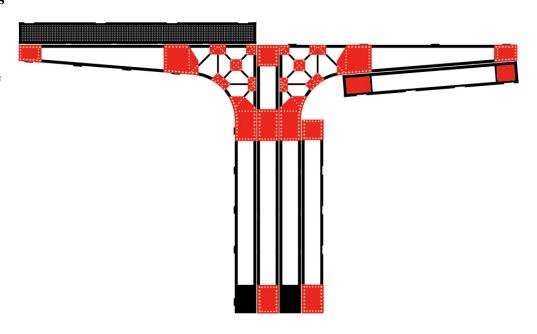
PAINTING BRASS Wash your completed assembly in warm soapy water. If it is really messed up with flux etc. you can clean it with a lacquer thinner first. *Do NOT bake the model if you used CA glue for construction*. Baking will set the paint to the brass as well as allowing you to paint over parts of 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 Gusset Plates

Remove the main body from the kit sprue. The vertical column sides have the signal head attachments in their center area. Remove them now and be sure to remove all remnants of the attachment ties. It is better to attach all of the 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

Use the image to determine the proper location. Secure by either solder or CA method from the inside.

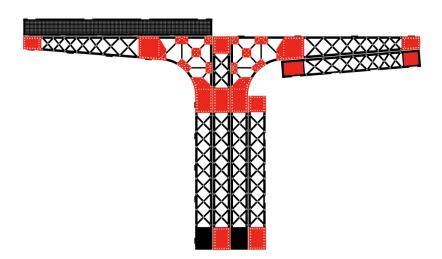


Step #2 – Attach X-Bracing

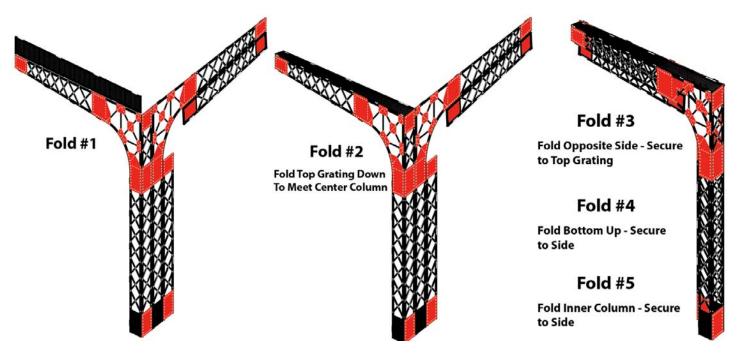
Remove the X-Bracing from the kit sprue on piece at a time. Be sure to remove all remnants of the attachment ties.

Remove then Attach one piece of X-Bracing at a time so you do not get the pieces mixed up.

Secure the X-Bracing to the body using glue or solder from the inside.



Step #3 – Bending 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 grated deck 90 degrees from the left side to meet the outer center column. Do not secure anything yet.

For the third Fold, bend the right side between the outer center column and the right side to meet the grated deck. There are tabs and notches to help in alignment of this joint. Secure using either glue or solder from the inside.

For the fourth fold, bend the bottom of the cantilevered arm up until it meets the left side. There are tabs and notches to help in alignment of this joint. Secure using either glue or solder from the inside.

The final fold is the inner center column. Bend 90 degrees until it meets the left side. There are tabs and notches to help in alignment of this joint. Secure using either glue or solder from the inside.

Take a few moments and file off any protruding remnants of the alignment tabs. A jewelers file works best for this.

Step #3 – Adding Details

Remove the Railing, the cantilever arm End Cap and the Rivet Strip for the Top Grated Deck from the kit sprue. Remove all remnants of the attachment ties.

Secure the Rivet Strip to the Top Grated Deck. You did file all of the tabs flat??

The End Cap has two bend lines on the back of the piece. Bend the tabs 90 degrees. Place the End Cap into the opening at the end of the cantilevered arm. Secure the End Cap.

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 railing. Secure the railing to the right side.

The ladder is separate from the kit sprue. Clean-up all remnants of the attachment ties. Bend the ladder attachment arms 90 degrees. The ladder is designed to be attached to the vertical column opposite of the Railing. Place the assembly on the workbench orientated so the vertical column is on the right and the cantilevered arm points to the left. Place the ladder such that the top attachments are at the top 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 Rivet Strip on the Top Grated Deck.

Step #3 – 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. The optional Platform may be added to the bottom of the Signal pole mounting to the Cantilever.





