# 10-Ton Team Track Crane

## All Scales

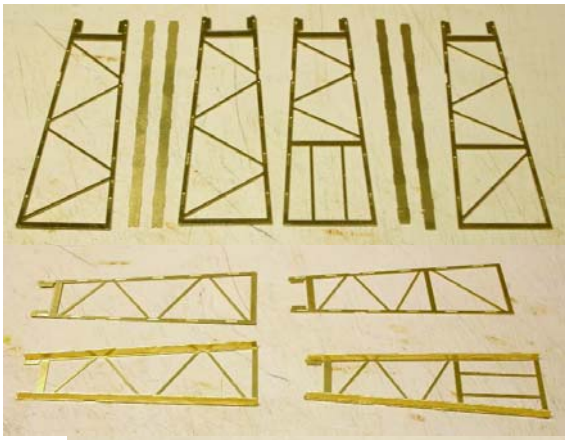
**Before Starting**

**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 – Building The Side Frames



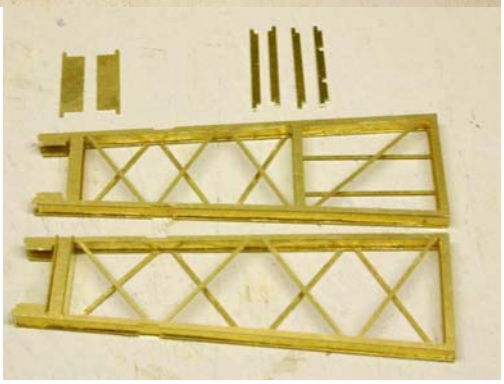
The Crane's Side Frames are different from each other. Examine the photo and you can see that the left Frame halves are similar and will produce a cross pattern once assembled. The right Frame has a horizontal cross bar and vertical posts that will be towards the outside.

Begin by removing the Frames from the sprue and clean off all tie remnants. The Frame Webs have tabs that go into the Frame Sides. The Webs are "handed" or can go only one way. Test fit the Frame Web to the Frame Side to see how they go together. Secure the Frame Web to a left and a right Frame Side on the inside of the Web. Make sure the Web is perpendicular to the Side.

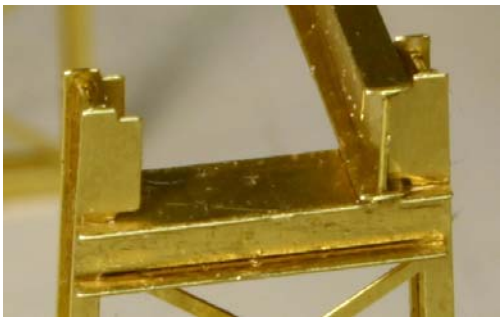
Now begin fitting the other Side to the Frame assembly. Be sure you have the diagonal braces on the Sides creating the crossing pattern as shown in the photos.

Finish securing the all sides.

The builder should notice that each Side Frame has a horizontal cross bar at the top of the frame. The horizontal cross bar will get an upper and a lower Plate that is installed from the outer side of the Frame. The right Frame has an additional horizontal cross bar near it's middle and has individual upper and lower plates.



Remove the four wide Plates from the sprue and clean them up. Install the Lower Plates to the horizontal cross bar. ***Although it does not matter which side of the left Frame is the outer side, the outer side on the right frame has the two vertical posts***. The Plate should fit snug up against all surfaces and extend all the way through the Frame and be secured to both horizontal cross bars of the Frame.



**<u>Take care installing the Upper Plate</u>**. The Upper Plate will share a slot that will also hold the Rail Beam. Study the photo.

The Plate should fit snug up against all surfaces (specially the top of the horizontal cross bar) and extend all the way through the Frame and be secured to both horizontal cross bars of the Frame.

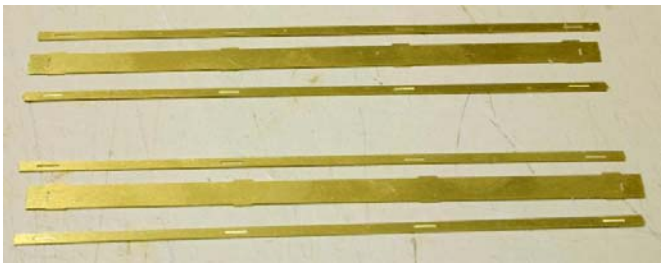
Add the individual Plates to the middle horizontal cross bar on the right Frame.

### Step #2 – Building The Rail Beams

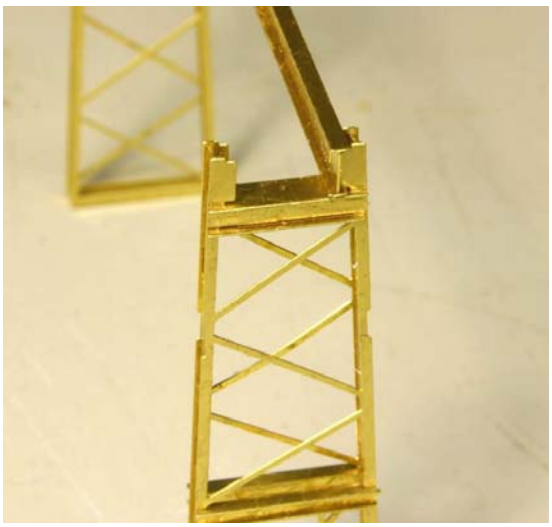
Each of the two Rail Beams is assembled from three components, A Web and two Cap Strips. Remove these components from the sprue and clean off all tie remnants. It is important for the builder to notice that the tabs on the web are different heights on each side.

The builder should also notice that the slots are different on the Cap Strips. One Cap Strip has slots that are only etched half way through and will be assembled to the side of the Web that has the shorter height tabs. The Cap Strip with slots etched all the way through will be assembled to the side of the Web that has the taller tabs.

Build the two Rail Beams ensuring the Cap Strips are perpendicular to the Web

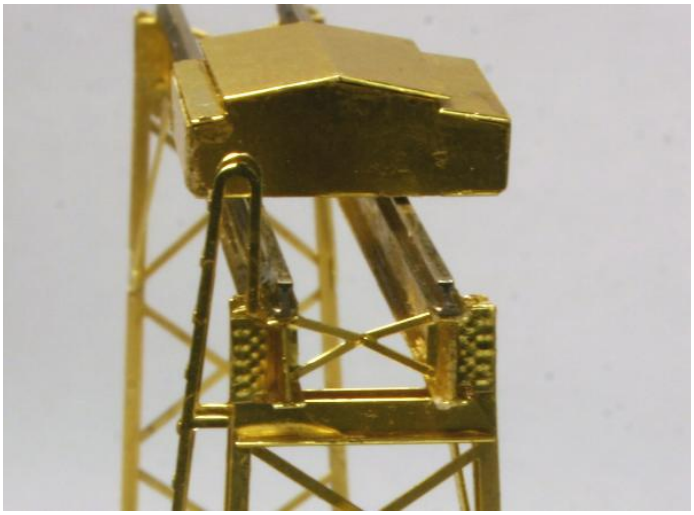


## Step #3 – Assembly



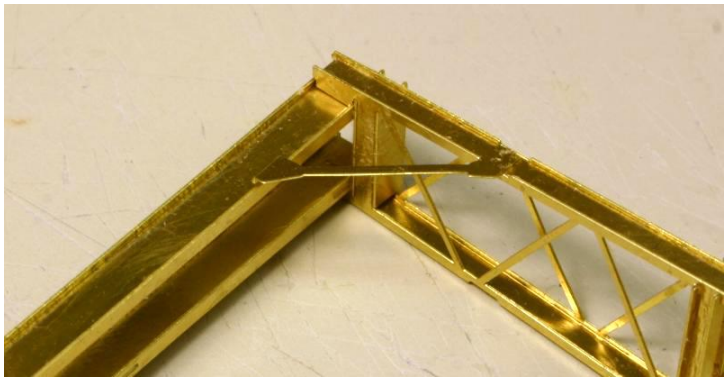
The Rail Beam will be installed with the fully etched slots upwards so they can be covered up by the rail when installed. Place a Rail Beam into the slot left when the wide Plate was installed. The Web of the Beam **MUST** be against the protruding part of the Frame. Reference the close up photo from the previous section.

Once a Rail Beam is fitted into both Frames, secure the Beam to one of the Frames *ensuring the Frame is vertical AND perpendicular to the Beam when viewed from above*. Secure the other end of the Beam to the other Frame. Ensure the Frame is vertical AND perpendicular to the Beam when viewed from above.



Secure the second Beam to the Frames. The slots in the Web at each end of the Beam are for an X-Brace detail that needs to be added at this point. The X-Brace must be bowed slightly to fit between the Beams and go into the slots. Straighten the X-Brace and secure it to the two Beams.

The builder can now add the Rivet Detail Overlays to the Frame at the Beam Webs.



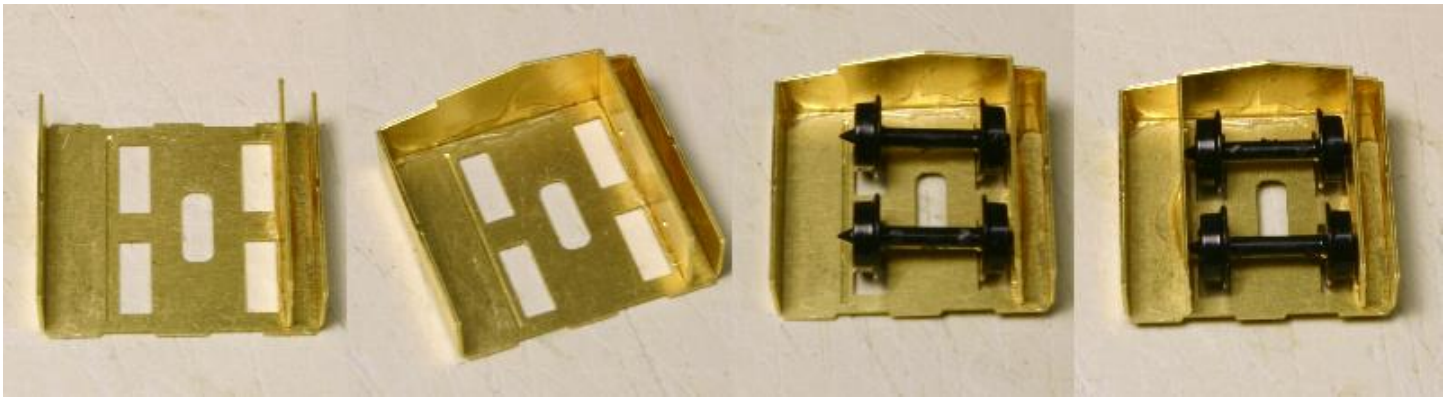
The Diagonal Brace has one end that fits into slots on the Frame and the other end must be bent to fit over the Cap Strip of the Rail Beam. Remove all four Diagonal Braces and clean off all tie remnants. Bend the end of the Diagonal Brace into the half-etched bend line for all Braces. First secure the Diagonal Brace to the Frame Web in the slot then secure the bent angle of the Diagonal Brace end to the Cap Strip of the Rail Beam. Repeat for all four Diagonal Braces. Add the Rivet Detail Overlays to the Diagonal Braces.

## Step #4 – Building The Crab

The Crab actually moves on the Rail Beams using Z-Scale wheel sets installed within the Crab Body. Begin by taking all of the Crab components of the kit sprue and cleaning off all tie remnants.

The Body has two sets of half-etched lines on opposite sides. The etch lines that are close to the center are slots for the tabs in the Wheel Bearings and this are on the inside of the Body. The etched lines further out from the center are on the outside of the body and are actually bend lines. Bend the Body away from the bend lines leaving the slots on the inside.

The builder should notice that the Crab's wheel openings are not in the center of the body. One end is longer than the other. Secure one Wheel Bearing onto the slot on the short side and then add one Body End. Secure all joints being careful of the openings for the Wheels. Insert both Z-Scale Wheels into the Body openings and the Bearing holes. Add the remaining Wheel Bearing to the body along with the other Body End. The roof of the Crab is in three sections. First secure the small and medium roof sections to the body. The large Roof section has a bend line where the Roof can be bent to the same angle as the Body Ends. Secure the large Roof Section to the Crab.



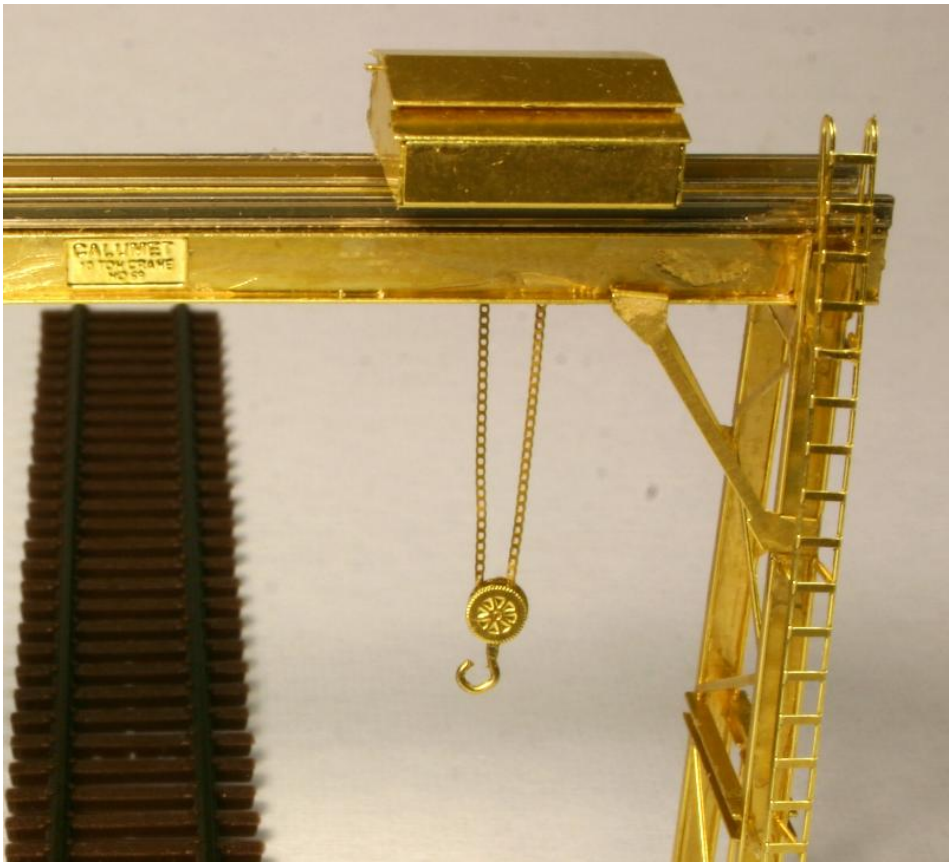
## Step #5 – Final Assembly

Cut the Rails to the length of the Rail Beams and Secure them to the Rail Beams using the Crab to properly gauge them.

Remove the Ladder from the sprue and bend the sides away from the bend lines allowing the Ladder Rungs to "pop out". Bend the Ladder Standoffs and secure the ladder to the right Frame.

A length of our Super-Micro chain has been included in the kit. Fold it in half and flatten the fold. Bend the piece of wire into a hook and use the included Pulleys hide the joints. Secure the other end of the Chain to the center opening of the Crab.

Attach the Builders Plate to each side of the Rail Beam.



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