

95ft Oil Drilling Derrick Instructions

Style #1 –N-Scale & HO-Scale

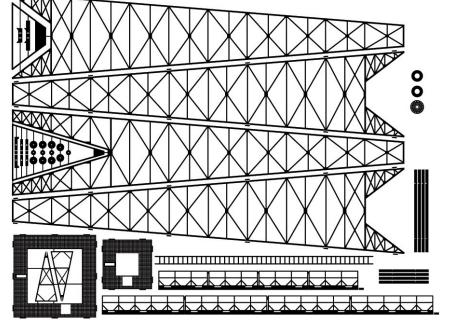
Kit Contents

Your tower kit will come with all of the following:

2ea. Derrick Sides with Tabs
1ea. Derrick Front with Pulleys
1ea. Derrick Top with A-Frame Top
1ea. Large Grated Platform with A-Frame Sides
1ea. Small Grated Platform
1ea. Large and Small Platform Railings
2ea. Ladders
4ea. Large Platform Joists
4ea. Small Platform Joists

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. You may need to make a



second cut to remove all of the ties, sometimes holding the part under a magnifying glass will help. 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.

SOLDERING BRASS Although you can use CA glues to hold the brass parts together, solder is still preferred by some modelers. For soldering you will need a small soldering iron (30-50 watts) with a good tip, some liquid flux, and some electrical solder. Plug the iron in and let it warm up for several minutes. Be sure you've got a place to set it down where the heat won't damage anything. Get a clean rag to keep handy for wiping the tip should you get more solder on than necessary. "Tin" the tip by applying solder to it so that the whole tip has been covered with a thin film of solder. Leave the coil of solder so that some solder is uncoiled and sticking out so you can touch the tip or the iron to it without holding the coil of solder. Join the pieces as follows: position the two pieces to be joined and hold one of them with one hand (the other piece will be resting on the work surface). With the free hand, apply some flux to the area that will be soldered, then pick up the hot iron, hold it on the solder and let the solder flow on the tip, touch the tip to the area where the flux is for just a few seconds while the solder flows off the tip and into the joint. The solder will cool and harden almost as soon as the iron is removed. Use waste pieces of brass to experiment with if you are not familiar with soldering. Remove excess solder with a file, clean the assembly in warm soapy water before painting.

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. After the paint is applied it helps to bake it in an oven for a few hours at 250°. This 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 – Assembling the Tower Section

a) Depending on the artwork version, the sides will have either 1) bendable tabs or 2) straight tabs with notches in the front and back. For bendable tabs, remove the topmost tab from the tower section. This tab might cause a rectangle at the tower top instead of a square that would interfere with the placement of the small platform later. For all other bendable tabs, take a pair of tweezers or pliers and carefully bend the tabs 90 degrees. You must bend the tab in the direction of the small etch line which aids in the bending process. *This bend line goes to the inside of the model to properly fold.* For straight tabs, the tabs will go directly into notches in the front and back tower pieces.

b) The front tower section (has large "V" in base) contains the components for the pulley blocks used in the next step. Remove them from the front section and put them aside. Clean all ties from the sides, front and back before proceeding.

c) Attach one side to the front section at each tab. Carefully glue or solder the tower side seams together between each tab.

d) Attach the second side to the front (large "V" at base) section at each tab. Carefully glue or solder the tower side seams together between each tab.

e) Attach the back tower section at each tab to the assembly. Carefully glue or solder the tower side seams together between each tab.

Step #2 – Assembling the Pulleys and Pulley Blocks

a) Remove one pulley set (two large disks and one small disk) from the holder. File away all ties.

b) Using a toothpick to aid in alignment, place the toothpick through the center hole in the large disk. Be sure it is perpendicular. Glue or solder (I really like using the CA glue for this step) the small disk to the large disk. The toothpick will properly align the center holes. Remove the sub assembly.

c) Place the second large disk on the toothpick and glue or solder the subassembly to the large disk. You now have a pulley.

d) Repeat steps *a*, *b* and *c* for the remaining two pulleys.

e) There are two straight pulley blocks and one pulley block with tabs. The straight blocks will attach to the bottom of the platform grating in the next step. The block with tabs is used in assembling the A-frame on the top of the derrick. Remove all three pulley blocks from the holder and remove all ties.

f) Bend one of the blocks on the fold lines. *This bend line goes to the inside of the model to properly fold*. Place a completed pulley in the middle and place a piece of the included .020in brass wire through the hole on the block side, through the pulley and out the hole on the opposite block side. Glue or solder the wire to the block side. Trim excess wire.

g) Repeat step f for the two remaining pulley blocks.

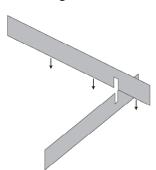
Step #3 – Assembling the Large & Small Platforms

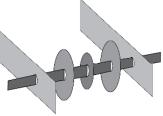
a) The platforms consist of a grated flooring, Railing that wraps around the flooring, joists that support the platform and a pulley block assembly that has NO tabs. When assembling the platforms, *be sure that the slots for the pulleys and the ladder access hatch are on the same sides*!!

b) Place the tabs of a platform floor in the slots on one side of the railing. *The bend lines goes to the inside of the model to properly fold*. Glue or solder ensuring the flooring is perpendicular. Bend the railing and place the next set of tabs in the railing slots. Secure the flooring to the railing. Repeat for the remaining two sides.

c) Remove all ties from the four floor joists. Each joist has two slots that go half-way through the joist. When two joists are placed perpendicular together with slots facing each other such that one slot slips into the slot of the second joist, the resulting assembly will be the same width. Assemble all four joists together.

d) Turn the floor and railing assembly upside down. Attach the pulley block to the floor making sure the pulley is centered in the slot. Place the joist assembly on the floor bottom ensuring the opening in the center of the joists aligns with the center opening in the flooring. Also ensure the joists do not protrude above the bottom of the railing. Attach by gluing or soldering.





Step #4 – Assembling the A-Frame

a) Clean-up all ties from the frame tops and sides.

b) The frame top has a long and a short piece that must be attached together. Be sure the slots for the pulley block are aligned.

c) Attach the completed pulley block WITH tabs to the frame top by inserting the tabs into the slots. Attach by either gluing or soldering.

d) Using the completed small platform as a reference for the correct angle of the frame sides, attach the frame sides to the frame top. The frame top is goes into the slot on the top of the frame side. See the diagram for how the A-Frame should fit to the small platform.



e) Attach the completed A-frame to the small platform. Be sure to orientate the A-frame to allow a cable to be threaded through the A-frame pulley and the pulley on the small platform.

Step #4 – Final Assembly

a) Slide the tower assembly through the bottom of the center opening in the large platform. The pulley should be at the rear of the tower (the front has large "V" at the base). Slide the platform down until snug. Standing the derrick upright, ensure that the platform is flat on all four sides. When satisfied, attach the large platform to the derrick.

b) Install one ladder on the side. The ladder should touch the ground and protrude through the ladder opening of the large platform. Ensure the ladder is vertical and attach using glue or solder to derrick.

c) Place the small platform on the derrick top. Be sure the two platform pulleys are on the same side. Ensure that the platform is flat on all four sides. When satisfied, attach the small platform to the derrick.

d) Install one ladder on the side. The ladder should begin at the large platform and protrude through the ladder opening of the small platform. Ensure the ladder is vertical and attach using glue or solder to derrick.

Enjoy your Oil Derrick



