

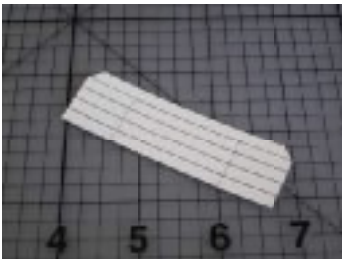
CYCLOPS Steamtank instructions

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Some notes before you begin. The model was designed using 65#-150gm card stock, using thinner or thicker card will make it more difficult for the parts to fit properly. Be sure to cut and score the parts carefully, they are designed to fit precisely. The building process is divided into two steps, parts prep and assembly. It is recommended that you prepare all of the parts before assembling the model. The parts prep photo's show the uncolored part so that you can better identify the score lines on the final part. I did not want to mar the finished parts with reference lines all over the designs, so you must take care to identify the score lines. The assembly process is fairly straight forward, and must be followed precisely. Always test fit parts and assemblies dry before gluing. And that's pretty much it. The photo's are mostly self explanatory, and I will make notes to explain any special instructions needed for the part. Have fun.

PARTS PREP

AXLES



AXLES. Score on all of the lines along the long side of the axle part.

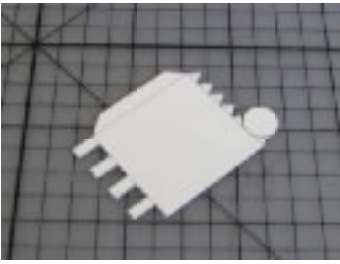


Carefully fold each side of the axle. To help fold long straight edges you can use the edge of a ruler. The tab is designed the same width as the axle sides, this is so you can squeeze the part together while gluing and maintain the proper shape.



Repeat for all of the axles. Once done your ready for the next parts.

SMOKESTACK and BOILER



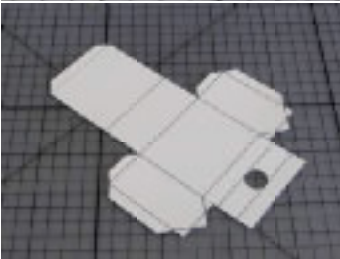
After cutting out the smokestack score along the top and bottom of the part, not the long tab. The smokestack will keep a better curved shape if you do not score the vertical tab.



Once scored, carefully ally a curve to the smokestack by wrapping around a dowel or pen. It is helpful to use a smaller diameter to apply the curve to the part. This will make it glue together much easier, and maintain a nice round shape.



First glue the long vertical tab, once dry fold in all of the small triangular tabs and glue the top down. Leave the long thin tabs at the base as they are, they are used to attach the smokestack to the boiler. You are now ready to prepare the boiler.



Cut out and score the boiler part.



Flip the part and insert the smokestack form the printed side. You want the long thin tabs to stick threw the smokestack opening. Try to align the smokestack tabs with the boiler.

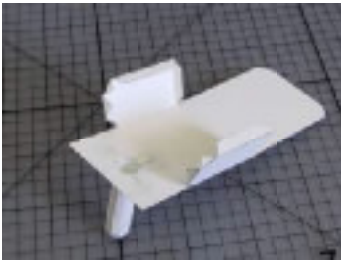


Fold down the smokestack tabs and glue.

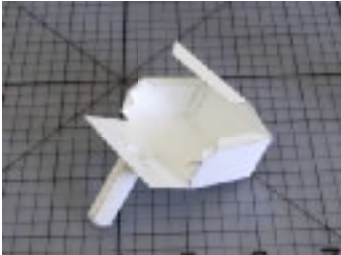


The smokestack is now attached to the boiler. You can now finish preparing the boiler. This is the only time you will have to put together two parts for the preparation of the parts. I couldn't find a better way to fit these two parts together at the time, and will try to avoid doing this in the future.

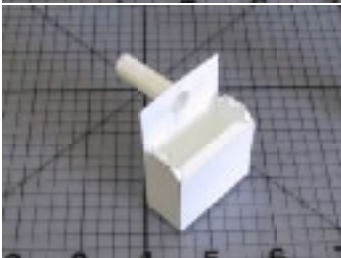
BOILER



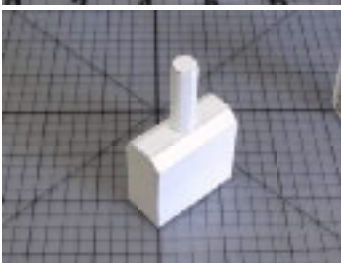
Start by folding in all of the tabs. Then fold the sides in.



Now fold the bottom and glue the bottom to the side tabs. Once dry, fold the backside up and glue to the side tabs.



Now fold the top down and glue to the top tabs.

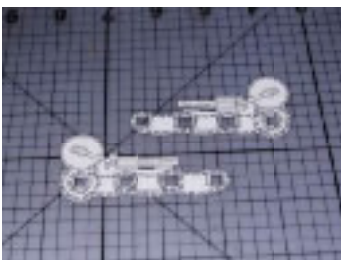


The boiler is now done, you are ready for the next part.

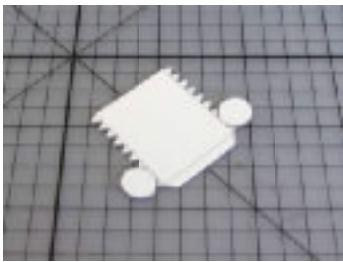
DRIVETRAIN



The drivetrain is a single sided part. It is designed to be glued to black card or construction paper. Rough cut the drivetrain parts and glue to a piece of black paper.

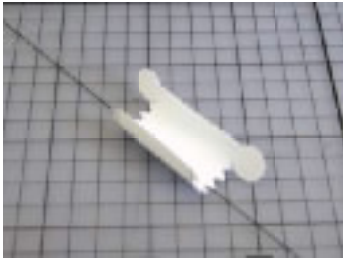


Once dry, cut out the parts. make sure to cut out the crossed out axle holes completely, to the edge of the white square. Once cut, the parts are ready and you can prepare the next part.



GUN BARREL

Cut out and score the circular ends and small triangular tabs. Do not score the long barrel tab.



Apply a curve to the barrel with a dowel or pen.



Glue the barrel over onto the long tab. Once dry roll and squeeze the barrel into a round shape.

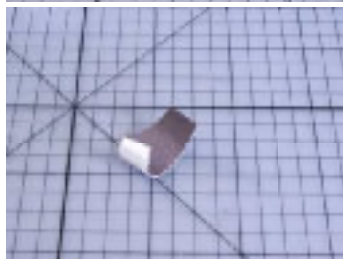


Now fold down all of the small triangular tabs and glue down the circular ends. The gun barrel is now done and you can now prepare the gun tip.



GUN BARREL TIP

The gun tip is designed to be glued to a piece of black paper, preferably construction paper. Cut the part out and glue to a piece of black paper. Once dry cut out part completely. Do not score the tab.



Apply a curve to the part by folding around a dowel or pen.

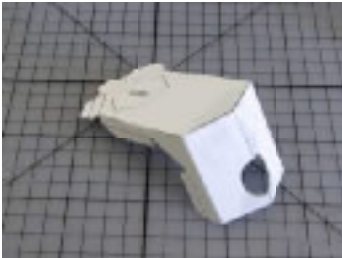


Fold around and glue over the tab. The tip is now done and you are ready to prepare the next part.

GUN HOUSING



Cut out and score the gun housing. Do not score the hatch, it is there for reference.



Start by folding the front tabs in, then fold the housing sides in. Glue the front sides in place over the front tabs. Make sure you glue the front side with the tab first, then the other front half over this.



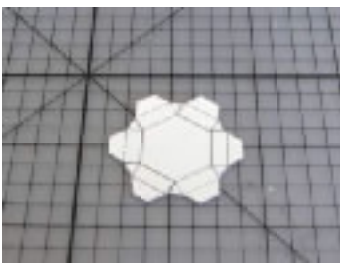
Now fold up and glue the rear sides.



Once all of the side sections are dry you can fold in all of the bottom tabs. These tabs are used to attach the housing to the turret, but not yet.

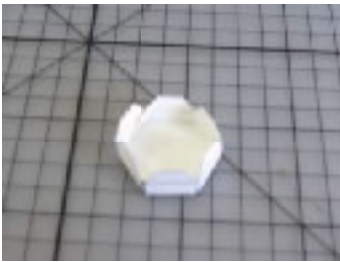


The gun housing is now done and you can now prepare the next part.



HATCH

Cut out and score all of the fold and tab lines on the hatch. Pay special attention to the triangular tabs and where they are cut.



Now fold in and glue each side to the others tab. The last tab will have to be squeezed in and glued to the back side of the first side folded in.



Once the sides are dry, you can fold in all of the bottom tabs. These are used to attach the hatch to the turret during assembly. You are now ready to prepare the next part.



PERISCOPE

Cut out and score all of the fold and tabs lines.



Fold in all of the tabs.

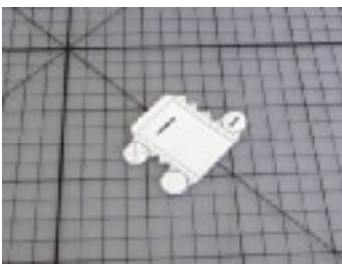


Now fold up the the bottom gluing to the bottom tabs. Then fold the front up and the sides onto the rear tabs.

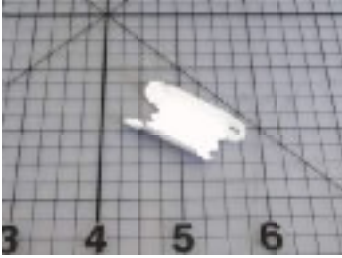


To finish, fold the visor sides and top down and glue the sides. The periscope is now done and you are ready to prepare the next part.

PISTON CHAMBER



Cut out and score only the circular sections and the triangular tabs. Do not score the long tab. Make sure you cut out the slots on the body of the chamber and the the end.



Apply a curve to the chamber by folding over a dowel.



Glue the chamber over onto the long tab. When dry carefully roll and squeeze the chamber into a nice round shape.



Finish the chamber by first folding in the circular tab with the cross mark. Fold in the small triangular tabs over this, then finally glue the circular end over the tabs. On the slotted side, fold in all of the tabs and glue the slotted circular end over the tabs. repeat for the other chamber. Do not worry right now which chamber is the left or right, that can be done during assembly. You are now ready to prepare the

SMOKESTACK TIP



The smokestack tip is designed to be glued to a black piece of paper. Even though I did not do it in this example. Rough cut the part and glue to a black backing. Then cut out the part completely.



Apply a curve to the part by rolling over a dowel or pen.



Glue the end over the tab, taking care to line up the ends carefully. The smokestack tip is now done and you can prepare the next part.

PLOUGH

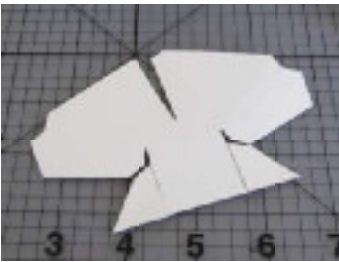
Cut out and score all of the fold and tab lines.



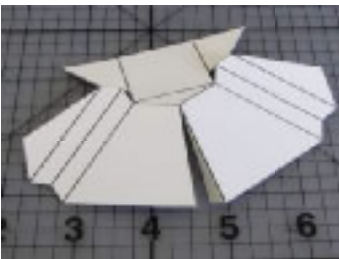
Start by first flipping it over and folding the rear triangular sides in completely over onto the matching shape. These will be inside the plough and provide support, so this section is doubled over.



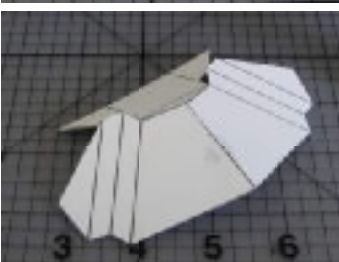
Once folded over glue back to back.



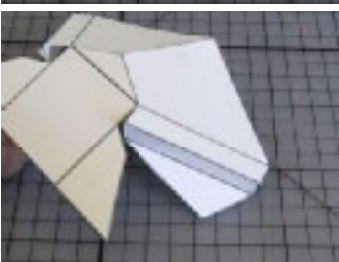
Flip the part back up. Now fold in the front plough sections.



Once in place, glue over the plough tab and wait to dry.



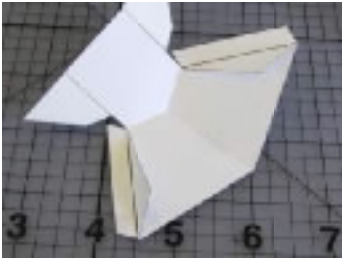
Now fold each of the side sections. The long rectangular sections will be glued back to back, while the triangular section will be glued to the backside of the plough.



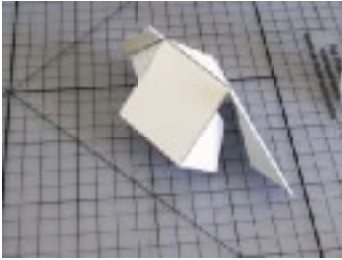
Now glue the side rectangular sections back to back. Do not glue the triangular section yet.



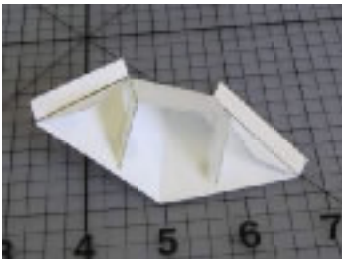
PLOUGH continued



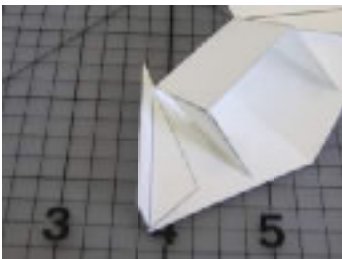
Repeat for the other side, and wait for both to dry.



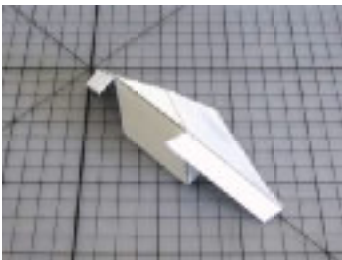
Now fold down the rear, and fold in the rear sides.



The rear side sections should be folded to a 90 degree angle and glued to the backside of the plough.



Now glue the side triangular sections to the backside of the plough.

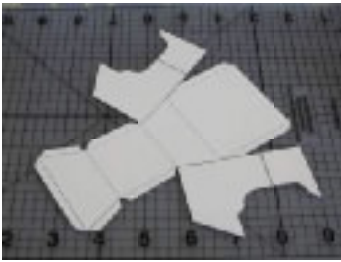


Carefully fold the side sections inward until they are 90 degrees from the plough front sections.

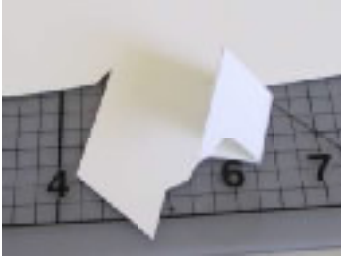


The plough is now done and you are ready to prepare the next part.

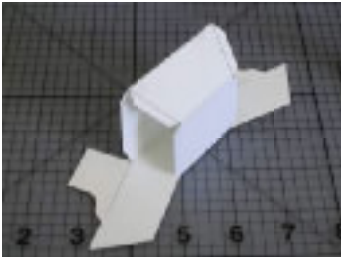
STOKERS/DRIVERS CABIN



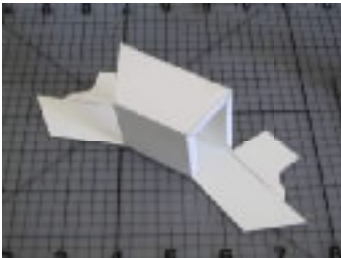
Cut out and score all of the fold and tab lines



First fold the side section completely over and glue to its matching side.



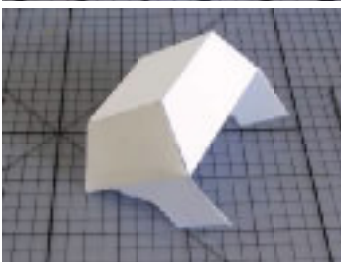
Fold the front and rear sections around and glue over the tab.



Fold in all of the side tabs.



Fold in the sides and glue onto the side tabs.

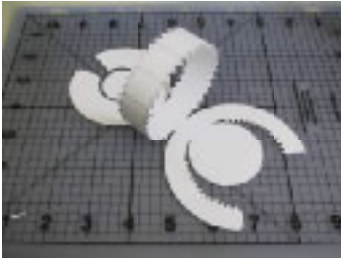


Carefully bend in the side panels. This can be done after assembly to line up with the rest of the tank. You are now ready to prepare the next part.

TURRET



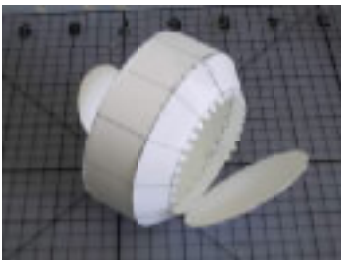
Cut out and score ONLY the triangular tabs, and the small connections between sections. Do not score the long tabs on the end of the curved parts, nor do you score the segments of the curved sections. They are only there for reference. Take special care when cutting out to leave about ten millimeters of connection for each section



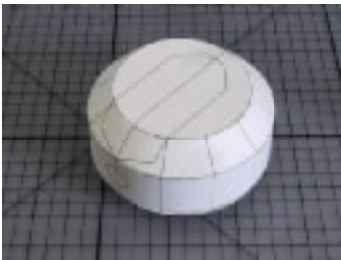
First bend around the middle section and glue over the tab.



Now bend around and glue the upper and lower curved sections.



Fold all of the triangular tabs in slightly and glue the upper section down over the tabs. Do the same for the lower section. Take special care to keep the sections aligned. I have found that it helps by gluing the area directly opposite of the connected area first, when dry, then glue the rest of the section.

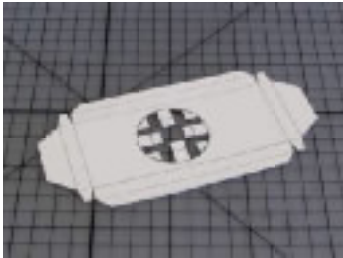


Now fold down the tabs on the upper section and glue the top over the tabs. Take care to keep the sections aligned while gluing.



Do the same for the bottom. The bottom section only has two tabs to glue to. You may have to put a bead of glue around the perimeter of the bottom circular section to give it strength. Once dry you are ready to prepare the next part.

TURRET BASE



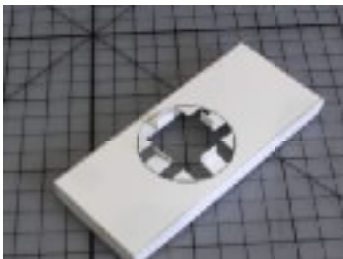
Cut out and score all of the fold and tab lines.



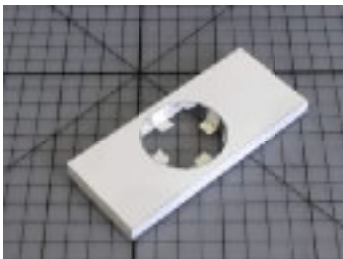
Flip over and fold in the front and rear sections. Fold in the side sections and glue to the end section tabs.



Fold in the bottom tabs. These will be used to attach the turret base to the water tank during assembly.

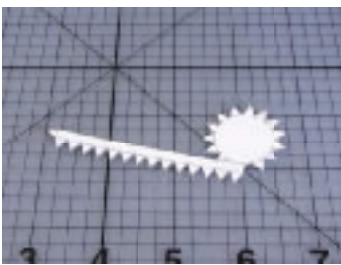


Flip up. Fold up the inside parts of the tabs.



Now fold down all of the tabs on the inside of the turret socket. The bottom parts of the inside tabs are to reinforce the turret socket, and are glued down to the water tank during assembly.

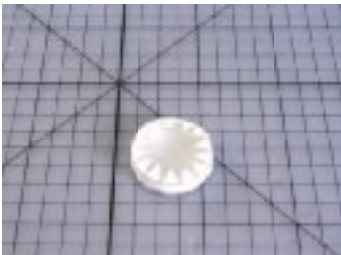
TURRET PLUG



Cut out and score all of the fold and score lines except for the tab at the end of the rectangle ring section.



Curve the outer ring. Glue over the end of the ring.



Fold in all of the tabs on the circle section and glue the ring section over the tabs. When dry, flip and fold in all of the ring tabs. These will be glued to the turret during assembly.

WHEEL



Cut out and score all of the tabs. Take care to cut the inside of the tread/tab transition section, it's the section that goes from the width of the wheel to the width of the tread. The tread is designed to be about 2mm wider than the wheel.



Fold and glue all of the tabs on the wheels. These tabs are made up of two parts, the long tab and the opposing short tab. First fold the long tab down, then fold and glue the short tab over the long tab. Be sure to keep the tabs aligned. repeat for all of the tabs.



Glue the tread on by gluing to all of the tabs. Start with the first tabs and roll the tread to the next tab and glue that one.



Repeat rolling the tread and gluing to the tabs until the entire tread is glued in place. Repeat for all eight of the wheels. Once done you are ready to prepare the next part.

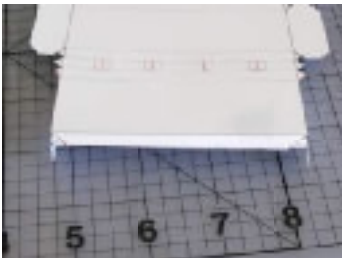
WATER TANK



Cut out and score all of the fold and tab lines. Also pay attention to the colored cut lines. These indicate where you should cut. The holes for the axles have colored reference lines to cut as well. They are designed so the inside sections of the axle holes can be folded in and provide strength to the side walls of the tank.



First fold in the index tabs, the ones marked with crosses. These get folded in first. Fold the large index tab in to 90 degrees, then fold the small index tab under the log side tab. Glue the long side tab over the small index tabs.



Pre-fold all of the fold lines to ensure that the corners will be sharp and square. This simply means to fold the part at all the folded lines, this will keep the parts flat and the corners straight.



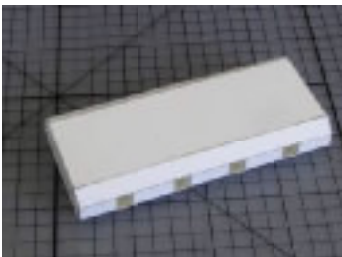
Wrap the tank sections around the large index tabs and glue over the tab with that was previously glued to the small index tab. make sure as you wrap the tank that you keep the large index tab square and flat.



Now make sure both large index tabs are pulled out to the very edge of the tank ends. Fold in the small triangular tabs and glue to the large index tab. Then glue the tank end section over this. Repeat for the other side.



Carefully bend in the inner tabs of the axle holes.

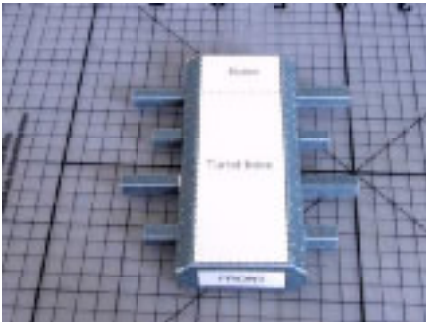


This completes the tank, and all of the parts for the tank. You are now ready to assemble the tank!

CYCLOPS STEAMTANK ASSEMBLY

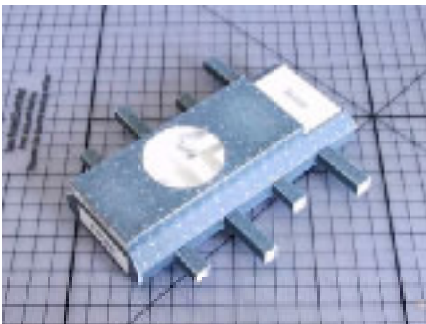
Well, you've made it threw the parts prep, and I bet your ready to get this sucker put together. These instructions will start from the first assembly and must be followed in order. The steps will be laid out one after the other with photo's for each step. I will make notes as well on trouble spots and tips to ease construction. Now lets build this tank...

STEP 1



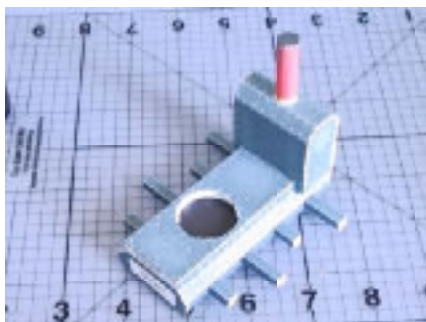
Take the water tank part and place face down. Now one by one insert the axles into the axle holes of the tank. There are two sizes of axles. The fist one in front should be small, followed by a long axle, then another short, and again followed by the final long axle. Always dry fit the parts to be sure they fit correctly, and are in the right place. Once in place, glue the axles by sliding them out and applying some glue to the inside of the axle, and slide back in place. Remove any access glue from around the axle

STEP 2



Glue the turret base to the top of the water tank. The water tank is marked where the turret base should be placed. It should line up with the front of the water tank when glued in place. The turret base is marked front and back, the front should be placed to the front of the water tank. Once in place, fold the inner tabs of the turret socket in place. The long tabs should be vertical with the short sections glued to the water tank. The small triangular tabs are simply folded in.

STEP 3



Place the boiler on the rear of the water tank. The boiler is marked on the bottom with the direction it should be placed. The boiler should be centered on the water tank and line up with the widest part of the water tank on the sides, and be flush with the rear of the water tank. Glue the the boiler to the water tank and turret base.

STEP 4



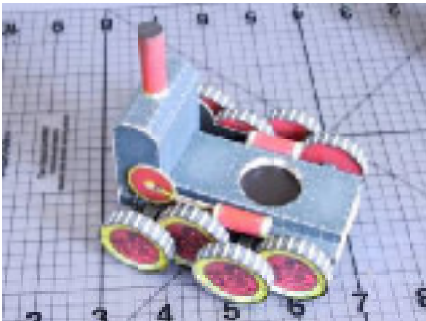
Assemble the drivetrain and piston chambers by sliding the chamber onto the piston tab. To make sure you have the right side, when you slide the chamber onto the tab the overlap folded side should be facing inward toward the inside of the drivetrain. The chamber will not go directly onto the tab. You will have to bend the tab slightly to the side to slide the chamber all the way. Then simply snap the chambers lower notch onto the lower tab. Glue the chamber in place by gluing the inside surfaces of the chamber and drivetrain, it will all be hidden when placed on the model.

STEP 5



Slide the drivetrain onto the side, over the axles. Make sure you can slide the drivetrain all the way to the water tank without binding too much. The fly-wheel of the drivetrain should be at the rear of the tank. Once you have them on the right side and they fit properly glue them by sliding them out and applying glue to the water tank where indicated and sliding the drivetrain back into place.

STEP 6



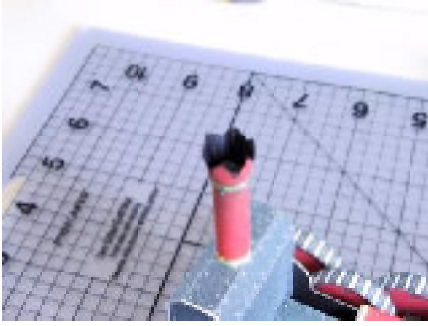
Separate your wheels from the left and right sides. To determine which side they belong to slide the wheel onto an axle with the overlap fold of the tread on the bottom, and the horse level. The horse should be going forward toward the front of the tank, if not it's on the wrong side. Once you have the wheels on the right sides, glue them on by placing glue around the hole in the back of the wheel and slide them on to the axle. Start with the short inside axles first and get all of the wheels glued to them first. Now glue on all of the outer wheels on the long axles.

STEP 7



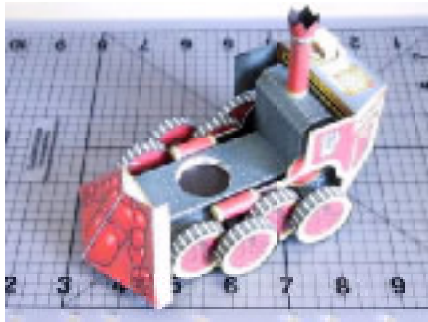
Glue the plough to the front of the tank. The back-side of the plough should line up side to side with the turret base. The bottom of the plough should line up with the bottom of the water tank as noted on the front of the water tank.

STEP 8



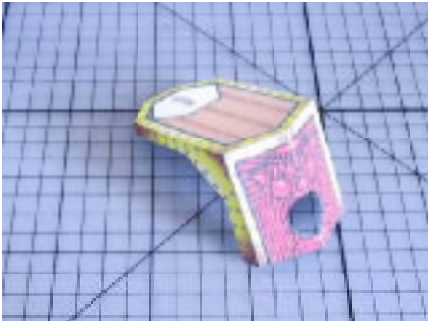
Glue the smokestack tip onto the top of the smokestack. Align the overlap to the rear of the tank.

STEP 9



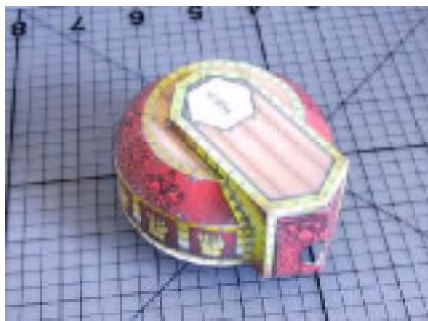
Glue the stokers/drivers cabin to the rear of the tank. The cabin should be centered side to side. The bottom of the cabin should be aligned with the mark on the back of the water tank. Also the periscope is glued to the section marked for it on the top of the cabin. When placing the periscope, the visor should be pointing to the front of the tank.

STEP 10



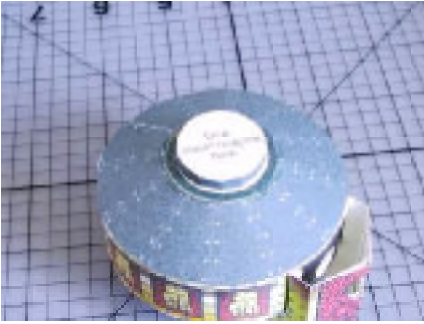
Glue the faceplate to the front of the gun housing. make sure to score the faceplate properly to get a good fit and not distort the gun housing.

STEP 11



Glue the gun housing to the turret. Carefully line up the gun housing with the area indicated on the turret. make sure that the tabs of the gun housing are folded in fully and that there is a tight fit on all the glued areas of the gun housing.

STEP 11



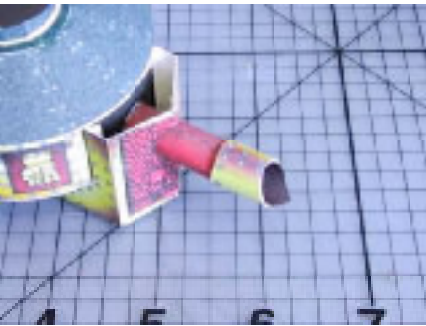
Glue the turret plug to the bottom of the turret. make sure the turret plug is centered properly and glue around the perimeter of the plug to ensure it will be strong enough to be turned on the tank.

STEP 12



Glue the gun barrel in place. Line up the back of the gun barrel with the overlap side facing the bottom of the turret. Use plenty of glue.

STEP 13



Glue the gun tip onto the gun barrel. The gun tip is designed to be slightly larger than the gun barrel and should slide on. Once in place, slide off and apply glue to the bottom section of the tip and slide back on.

STEP 14



To finish up the turret, glue the hatch to the top of the turret where indicated. The hatch is designed to face any direction, and it is not important how it is placed. make sure that you place it directly over the area indicated on the top of the turret.

FINISHED



Place the turret onto the tank. You are finished!
Sit back and enjoy your new tank.

I hope you have enjoyed building my tank model. I had a lot of fun designing it. I have several variations of this tank planned in the future. So keep an eye out for them at PAPERWORLDS.COM, user name ONE-MONK. This model was designed for the bimonthly MINIATURES IN PAPER showcase. Everyone is encouraged to try their hand at paper miniature and model designing. JIM

