



Instruction for VSB-30

First print the model on thin card-board. Print each page seperately. When printing the pdf-file in adobe - print at the «actual size». Page 2 is the backside for page 1. Print the stand on thicker card- board in a color of your own choice.

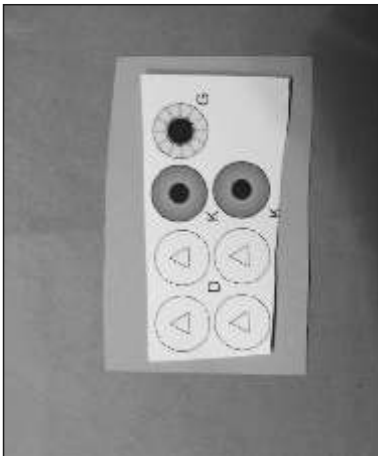
To build the rocket you will need a flat cutting surface, a metal ruler, white glue, a sharp knife for cutting, a scissor and some toothpicks to apply glue to the parts.. To strengthen some of the parts you will need some thicker cardboard.



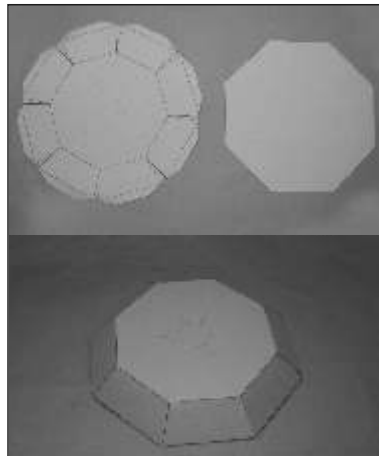
Remember to score all of the parts before folding. I gently score them with a sharp knife. Dryfit the parts before gluing them in place. On my webpage you can find links to websites with hints about building paper models.

Thanks to Erik de Schrijver, Sint-Pieterscollege Jette, Brussels, Belgium for the idea to this model.

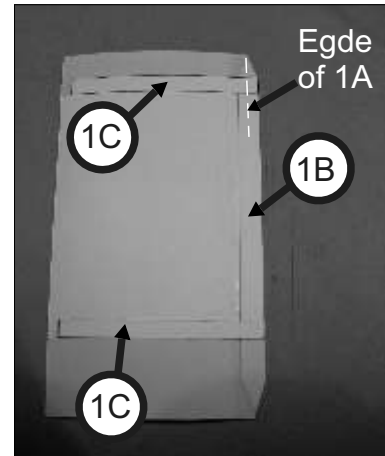
You are welcome to send me pictures of the finished model - just send an email to nielspapermodels@yahoo.com



Glue 1D, 1K and 1 IG to a piece of cardboard. Allow to dry.



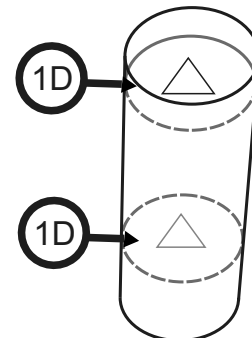
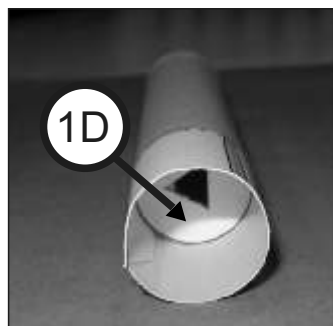
Cut out and glue the stand together - then lay aside.



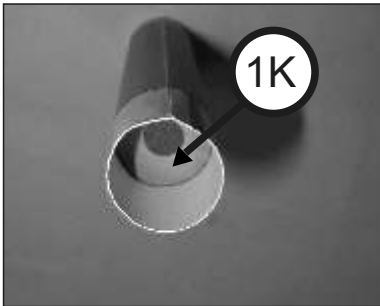
Glue the connector 1B and the strips 1C to the backside of 1A. Use the blue markers as guidelines.



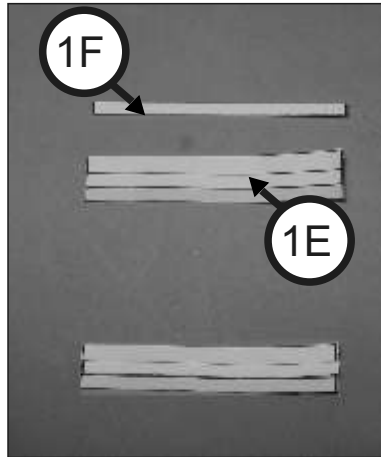
Roll and glue 1A into a tube



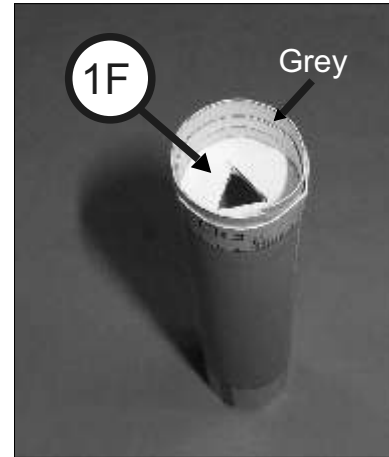
Cut out two of the discs (1D) and glue one inside the top and one inside the bottom of the body tube (1A).



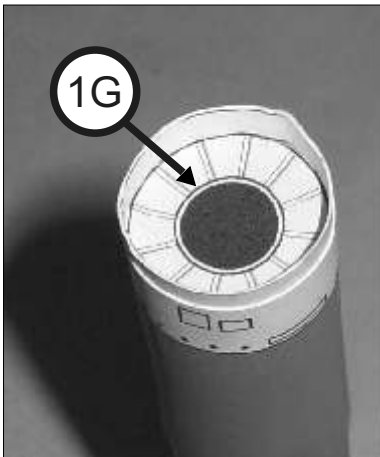
Cut out one and only one! of the discs 1K and glue it to 1D at the bottom.



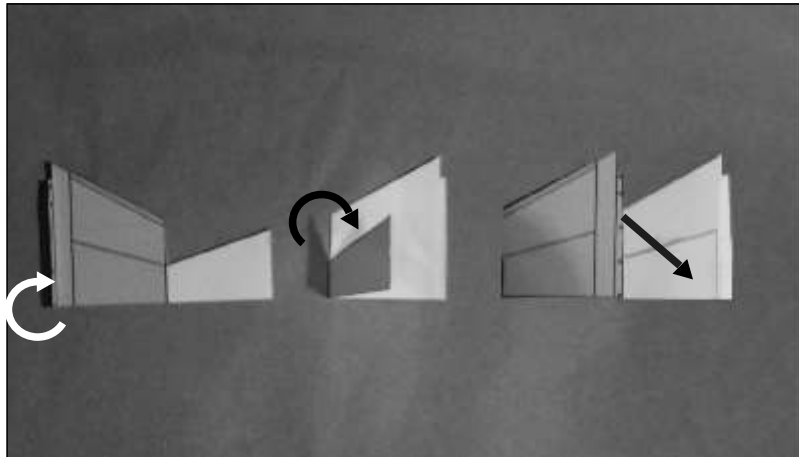
Glue 1F to 1E as shown.



Now glue 1F to the top of 1A. Notice the grey section of 1F is at the top.



Cut out disc 1G. Make sure it fits inside the top of 1A. Then glue it in place.



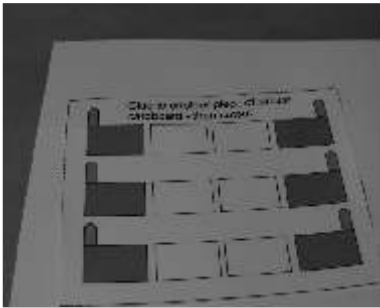
Each fin consists of two parts 1I and 1J. First fold the small bracket upwards. Then fold and glue the larger tab to the backside. Then glue 1I and 1J together.



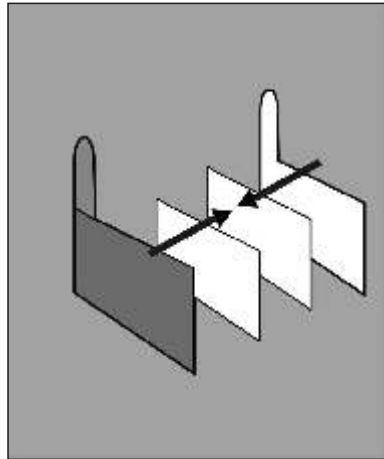
Sharpen the edge of the top of the fin, while the glue is still wet.



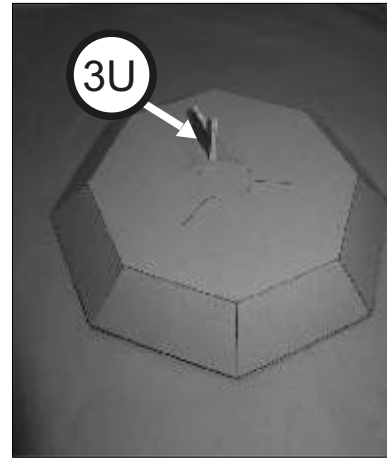
Place the rocket on a flat surface. Glue the fins in place as shown



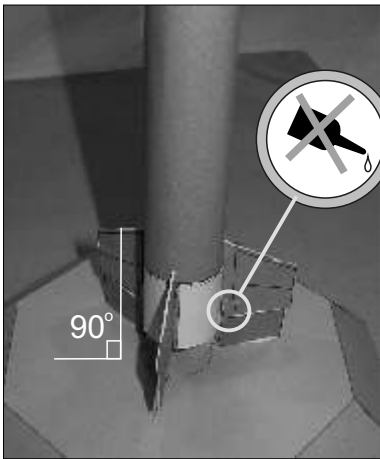
Glue 3U to the same kind of cardboard, that you used for printing the model.



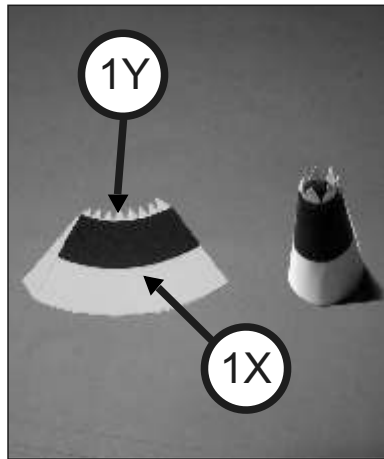
When dry - cut out and glue the four parts together. Make 3.



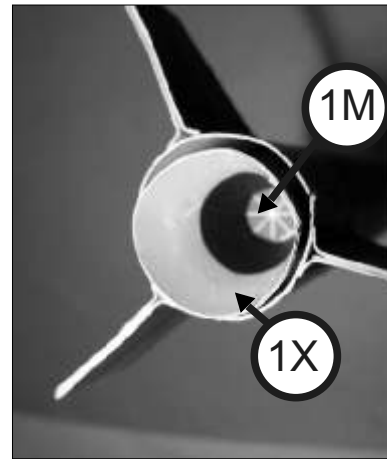
Glue one of the 2U to the top of the stand.



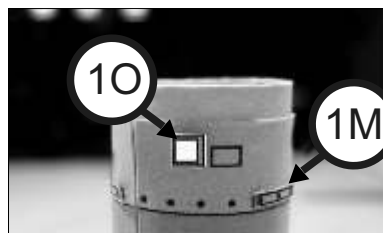
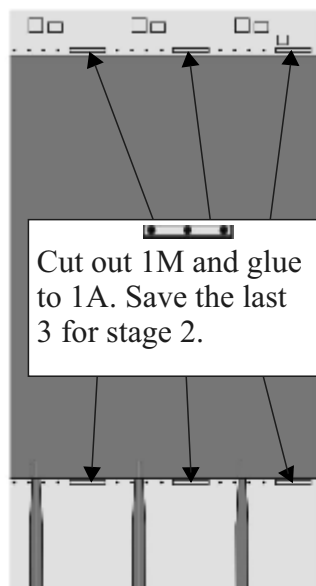
Use the rocket as a template to glue the rest of the 3U in place. Make sure the rocket stands straight.



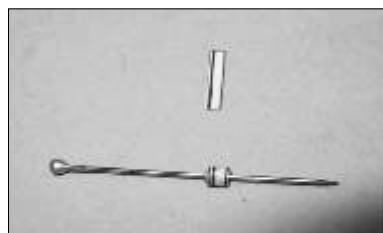
Glue 1Y to the backside of 1X. Then glue in to a cone. 1Y should be on the inside.



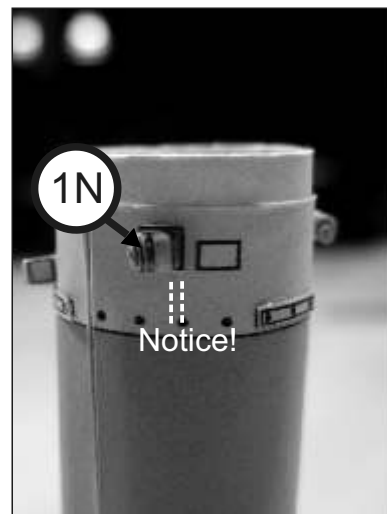
Glue the nozzle 1X in to the bottom of the rocket. Then glue 1M to the bottom of 1X.



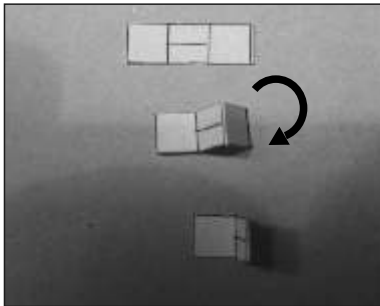
Cut out 1O and glue in place.



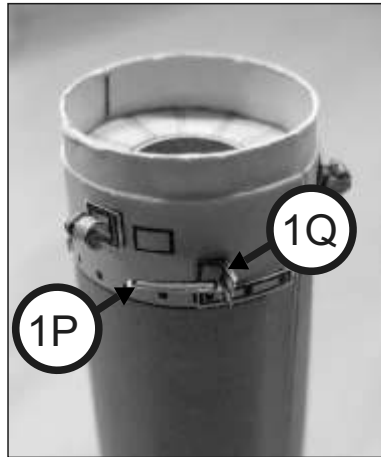
Roll and glue 1N in to a cylinder tube using a needle. Make 3.



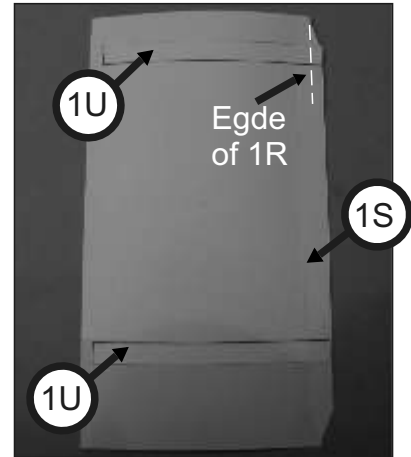
Glue 1N in place as shown above.



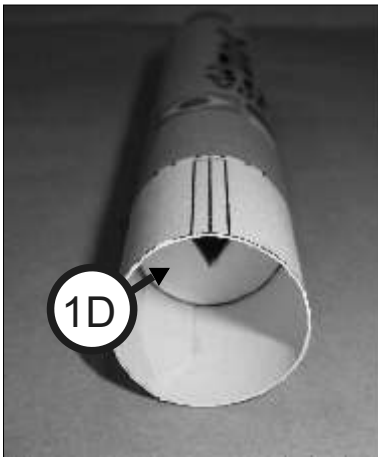
Cut out, score and fold 1Q



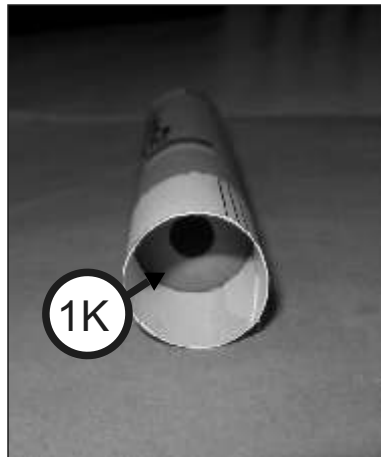
Now glue 1Q in place. Then cut out and glue 1P to 1Q. First stage is finished.



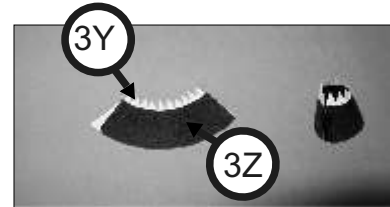
Glue the connector 1S and the strips 1U to the backside of 1R. Use the blue markers as guidelines.



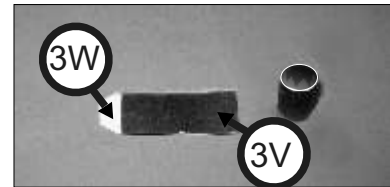
Roll and glue 1R into a tube. Glue the remaining 2 discs 1D into the top and bottom.



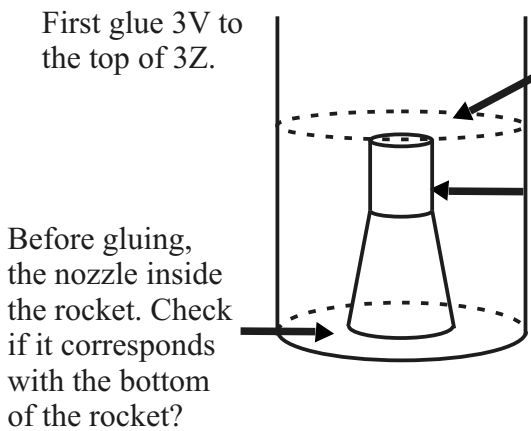
Glue the remaining disc 1K to 1D at the bottom.



Glue 3Y to the backside of 3Z, then roll and glue it to a cone.



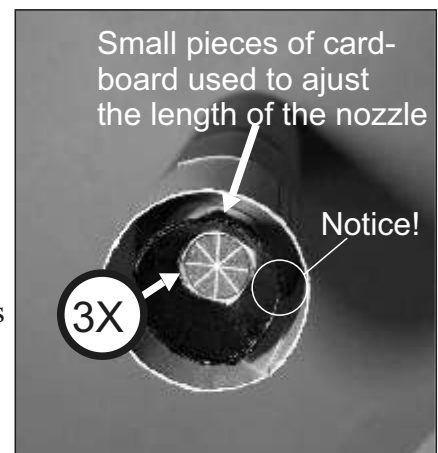
Glue 3W to the backside of 3V, then roll and glue it to a cylinder.

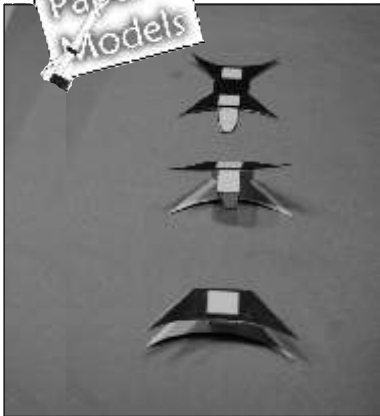


If the nozzle is too short, glue small pieces of scrap cardboard to the end of 3V.

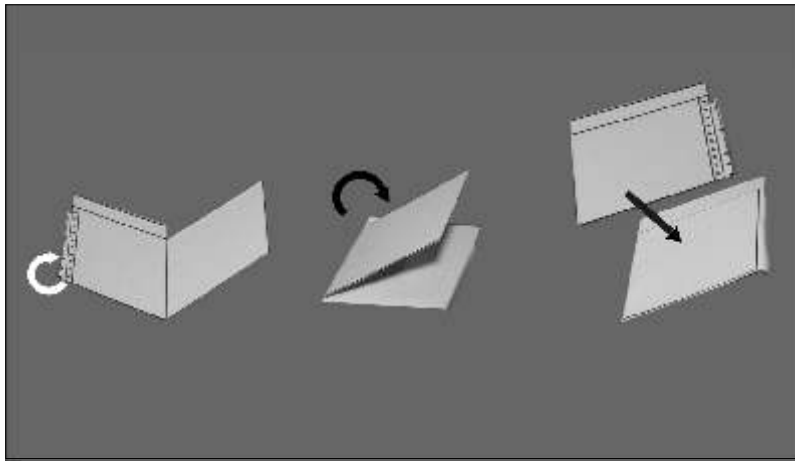
If the nozzle is too long carefully remove a little of 3V.

When the nozzle fits glue it in place and glue 3X inside the nozzle.

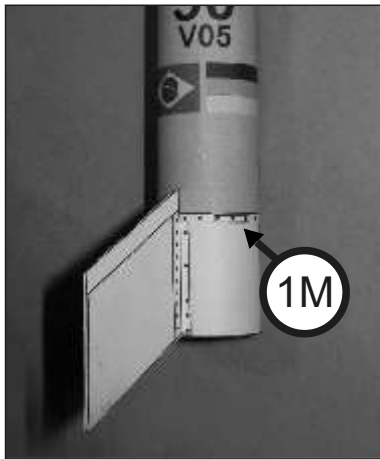




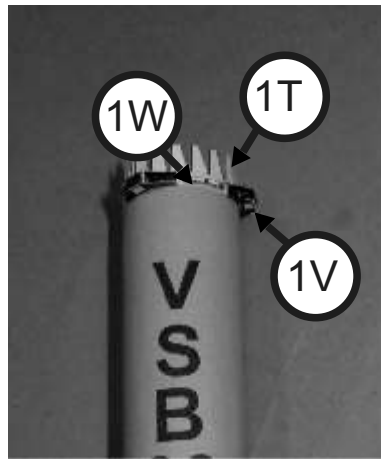
Now carefully score and cut out 1V. Fold and glue them as shown above.



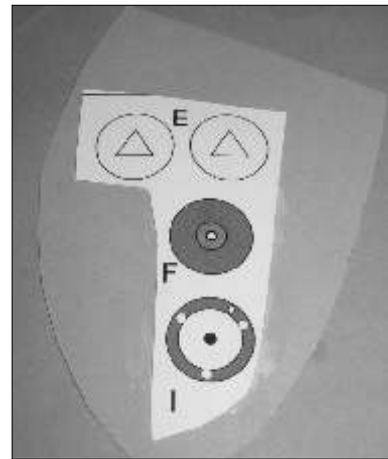
Each fin consists of two parts 3K and 3L. First fold the small bracket upwards. Then fold and glue the larger tab to the backside of each part. Then glue 3K and 3L together.



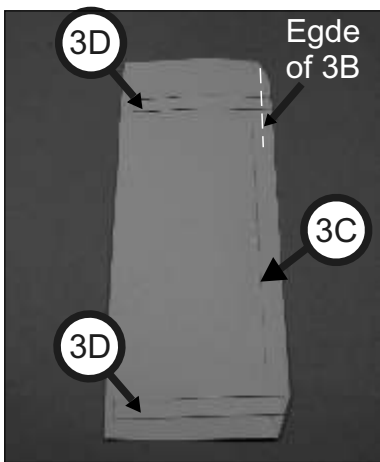
Glue the remaining pieces of 1M in place at the bottom. Then glue the fins in place.



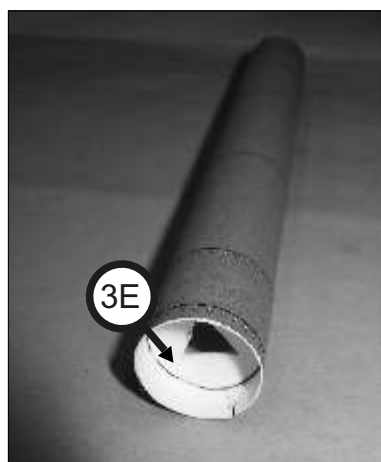
Glue the connector 1T in to the top. Then glue 1W and 1V to the top.



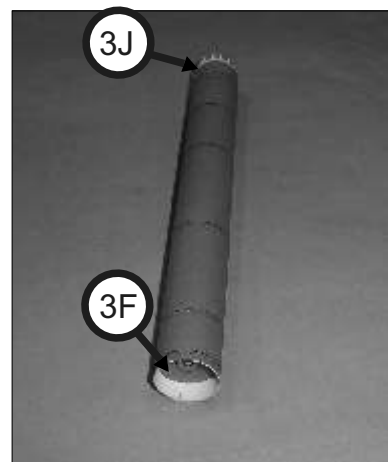
Glue 3E, 3F and 3I to a piece of cardboard. Allow to dry.



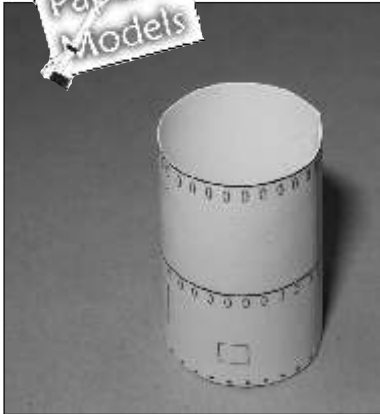
Now assemble the payloadsection (3B). Glue connector (3C) and the strips (3D) to the backside.



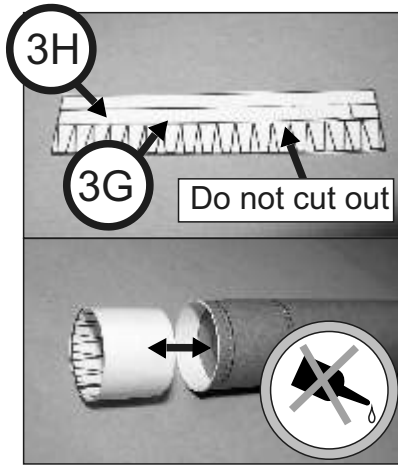
Roll and glue 3B into a tube. Glue the two discs (3E) in to the top and bottom.



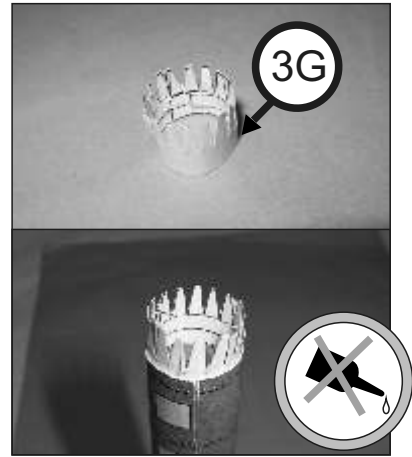
Then glue disc 3F to 3E at the bottom. Glue the connector 3J in to the top.



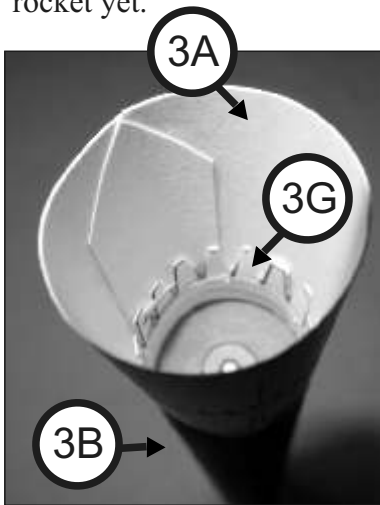
Glue 3Ax into a cone using 3Ay. Do **not** glue it to the rocket yet.



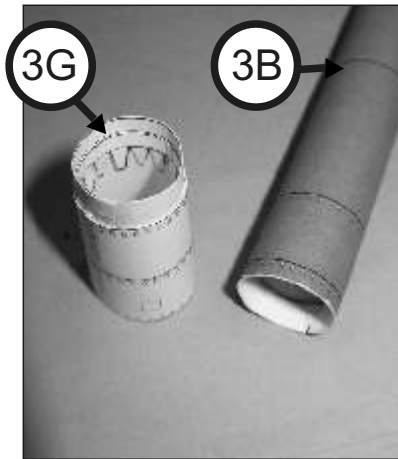
Glue 3H to 3G. Roll and glue it to a cylinder, which fits very tight in to 3B.



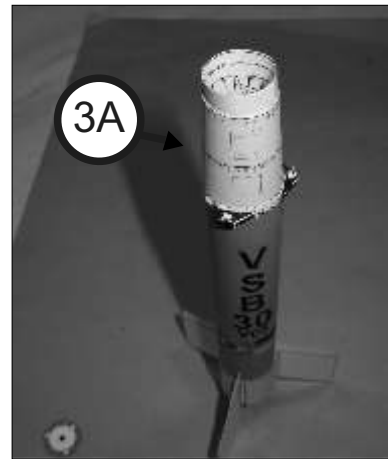
Cut out the glue tabs. Place 3G in to the end of 3B. Do not glue.



Now place 3A at the end of 3B. Then glue the glue tabs of 3G to 3A.



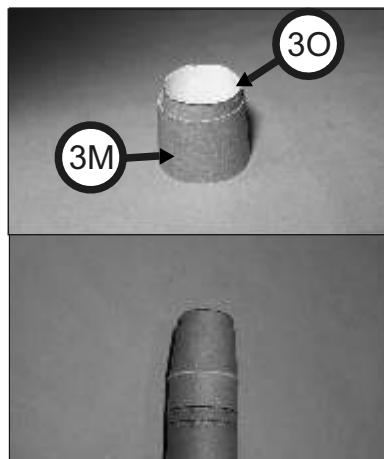
The remove 3A from 3B.



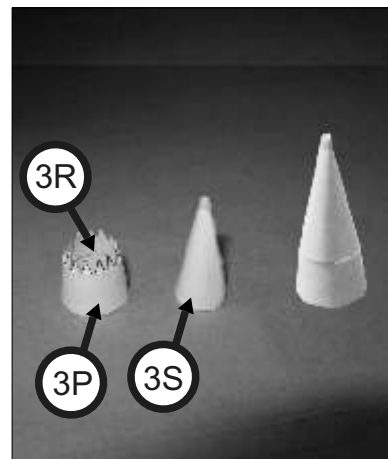
Then glue 3A on the top of the second stage.



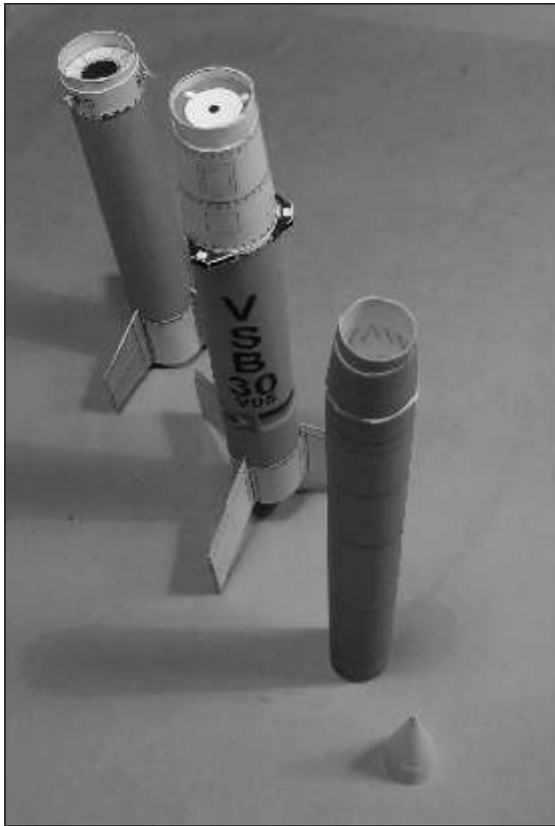
Cut out 3I and carefully glue it in to 3G. Notice the position of the small retainer. Second stage is now finished.



Glue 3M in to a cone using 3N. Glue 3O inside 3M. Then glue 3M to the top of 3B. The payload section is now finished.



Glue 3P to a cone using 3Q. Glue 3S to a cone using 3T. Glue them together using 3R. The removable nosecone is finished.



The finished model should look like this. In the front the nosecone, then follows the payload section, the second stage and the first stage.



Here all the sections are assembled (do not use glue) on the stand.