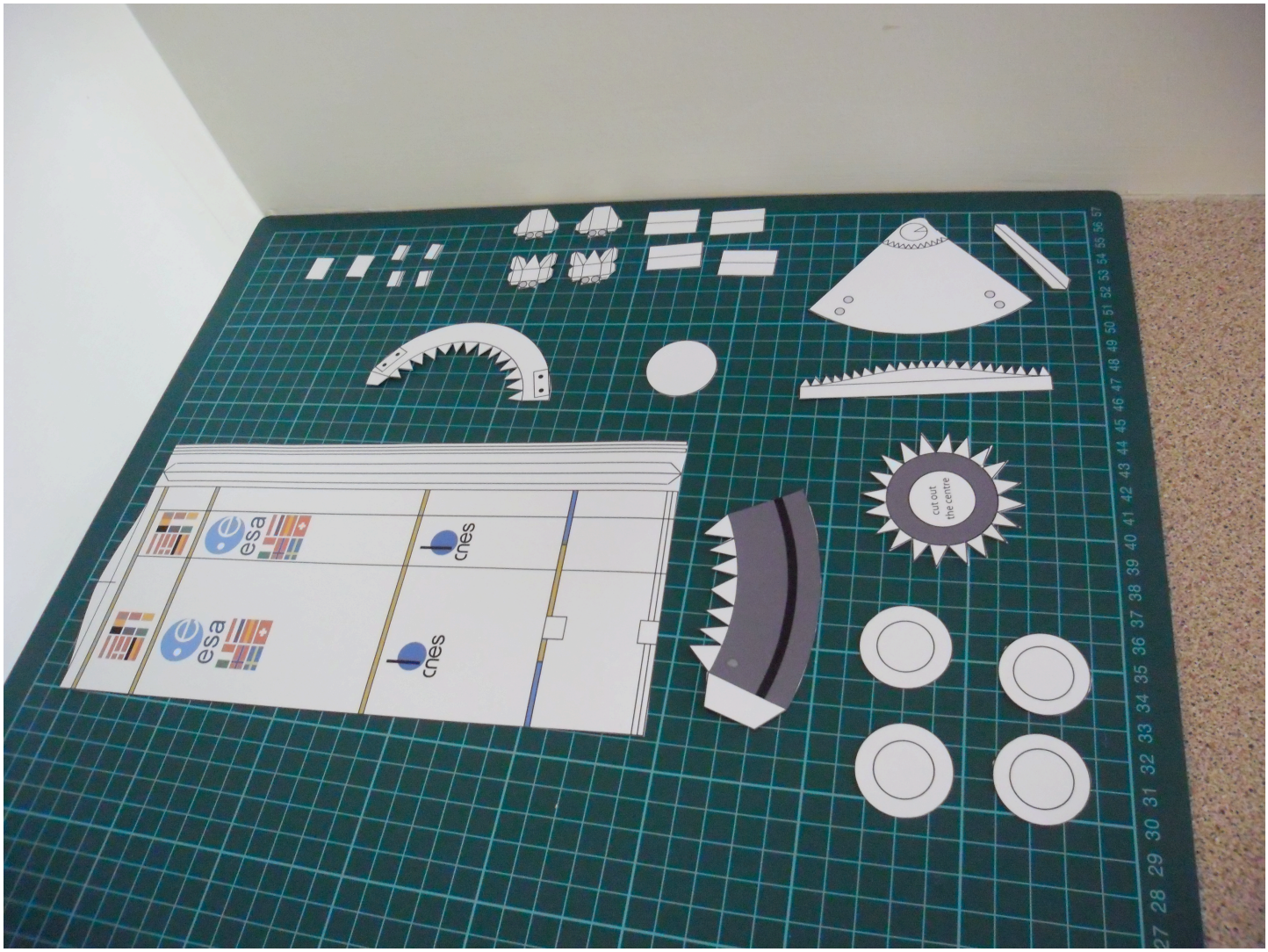
Instruction Manual: Ariane V

(Solid Rocket Booster)

Designer's comments: This model has been designed based on engineering blueprints, conceptual diagrams and illustrations. A certain degree of 'artistic licence' has been used to create a model that exhibits at least a modicum of realism.

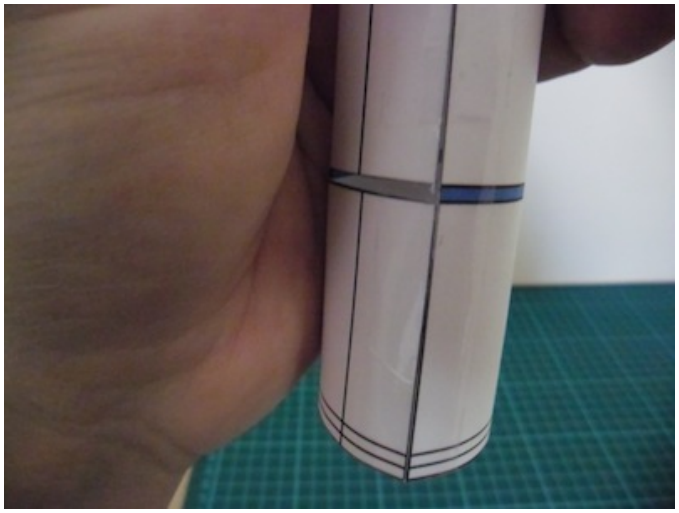
The assembly of a model should follow a procedure that vaguely resembles the method for cooking a meal; i.e.

- Prepare a place where you can work, without distractions.
- Get all of your equipment (utensils) out and ready.
- Get all of your parts for the model (ingredients) printed, cut out and ready to start.
- Lastly, try to have a location for your model prepared in advance, so that when it is finished, you will know where to place it.

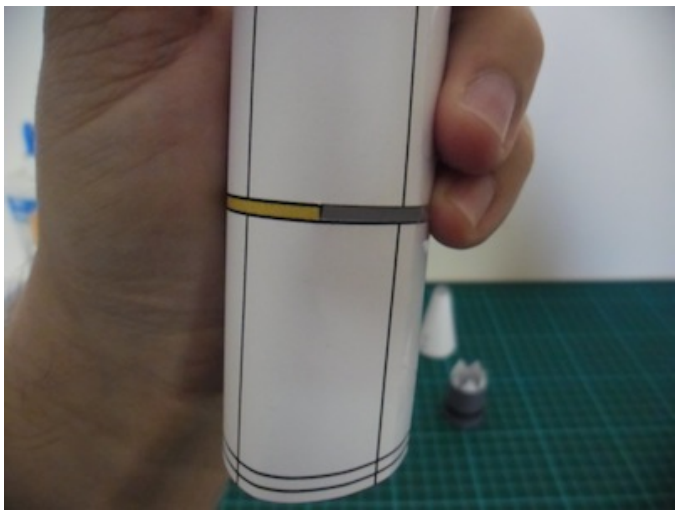


1. This photo shows the various parts needed to create only one SRB.

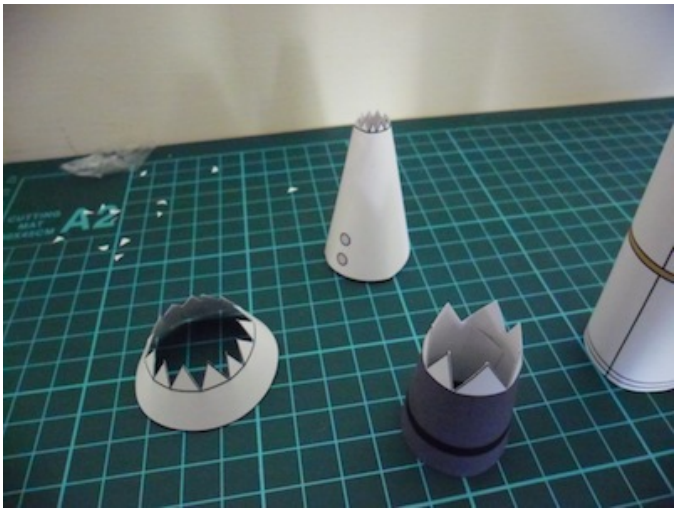
2. This is the main cylinder for your SRB.



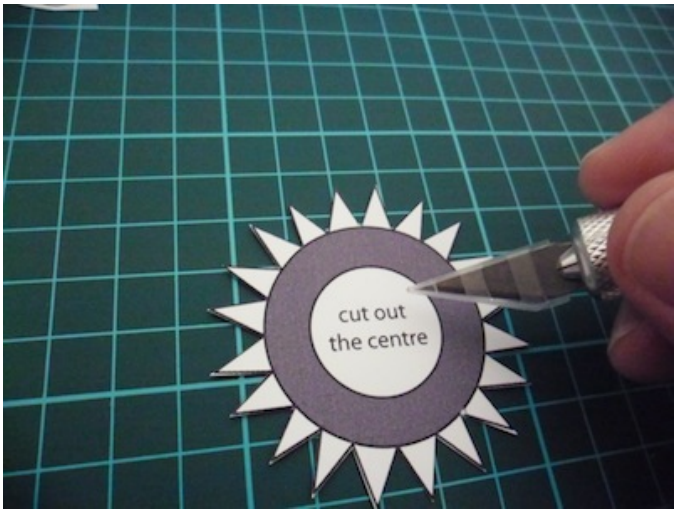
3. Only cut one half of the total portion of the blue band, leaving the other attached (to provide structural support during the rest of the assembly procedure.



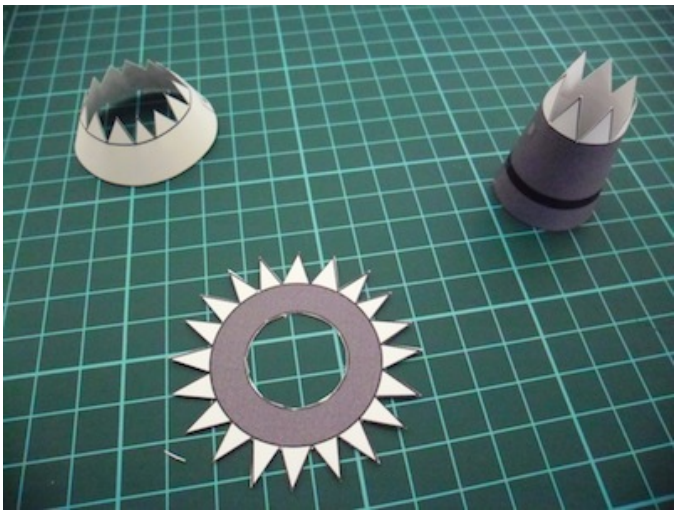
4. The SRB is then rotated 90º. Notice that the rest of the yellow band is till intact and untouched.



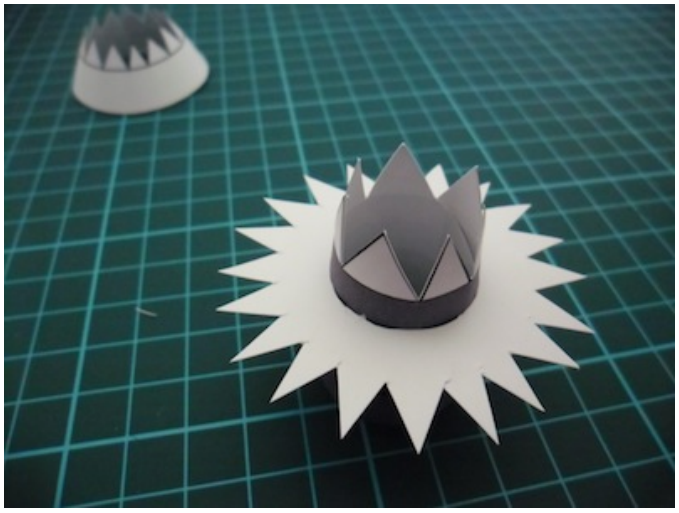
5. The top cone for the cylinder (top of the image), the main engine (right) and the lower SRB shroud (left) need to be done next.



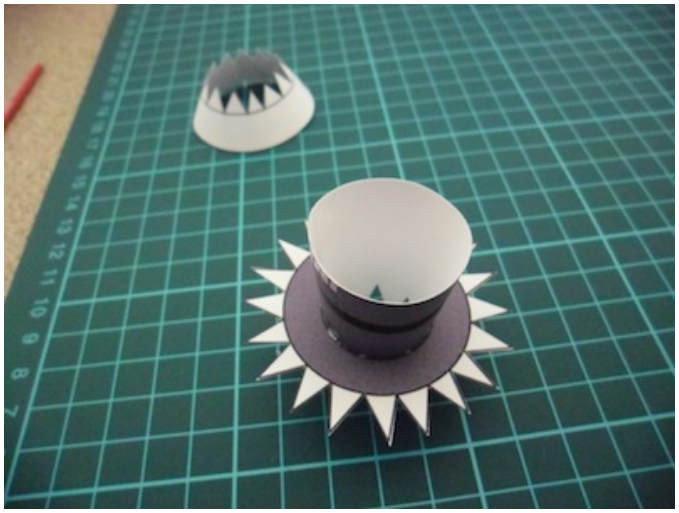
6. Cut out the centre of the engine support.



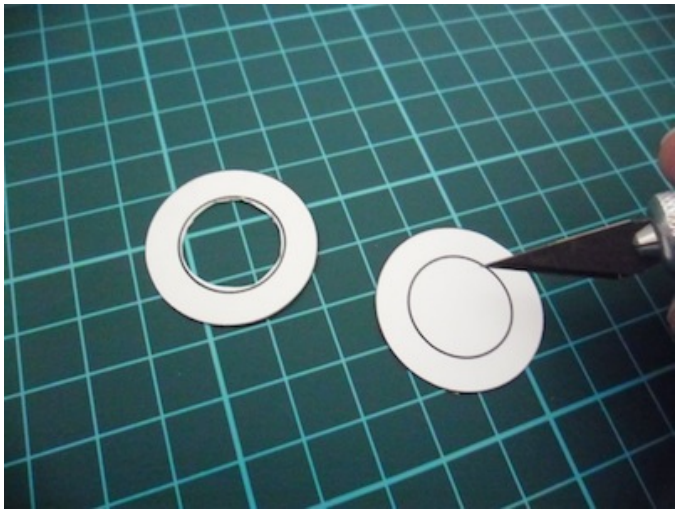
7. Now the three parts are ready for assembly.



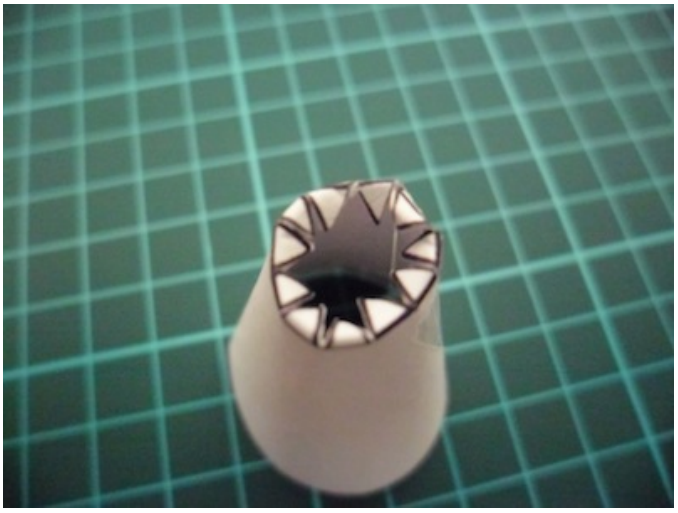
8. The main engine fits inside the support bracing.



9. These are the same parts, only showing the underside.



10. Support rings need to have their centres removed to provide access to the interior of the main cylinder during assembly.



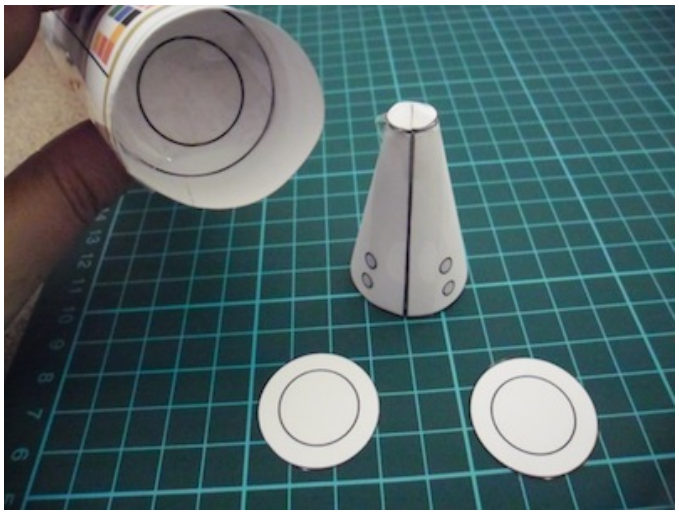
11. This is the op of the SRB cone, showing the glue tabs.

12. I went to a craft and hobby shop where I was able to purchase small plastic beads that had been covered with silver paint. These are optional parts.

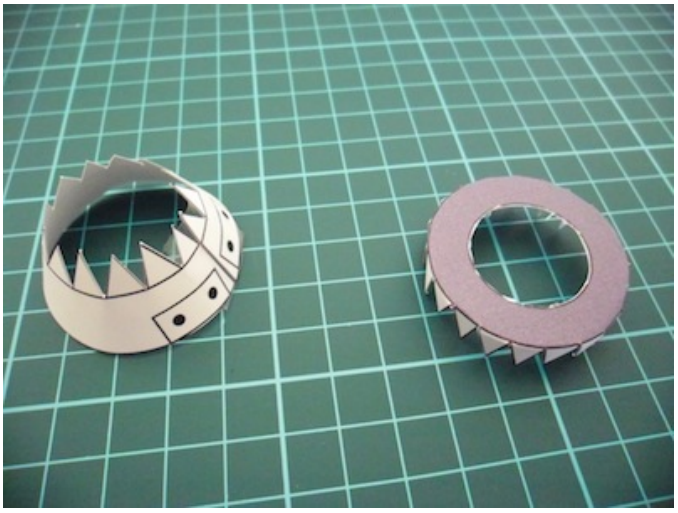
13. If you wish, you can glue a small bead to the top of the SRB cone… or…

14. You can use the paper part that I have supplied with the model blueprints.

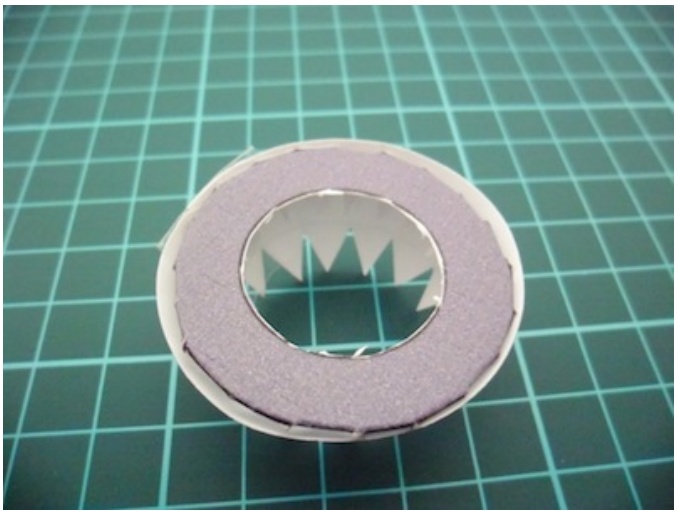
15. Here is the finished conical section of the SRB with a paper cone on the top.



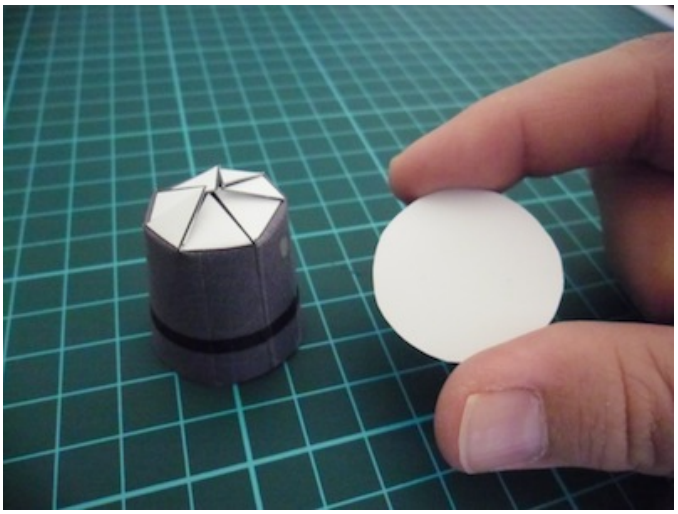
16. The two smaller support rings can be used to provide internal bracing for the upper cone of the SRB. Glue the cone to the cylinder of the SRB.



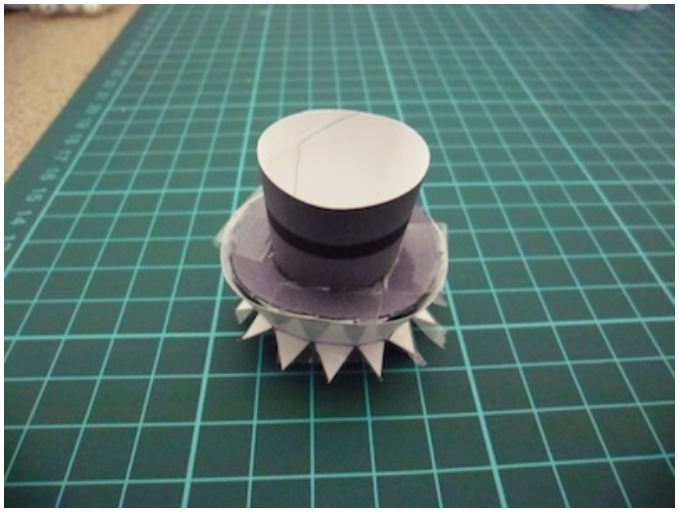
17. To assemble the engine, you need to glue the engine support (right) to the engine shroud (left).



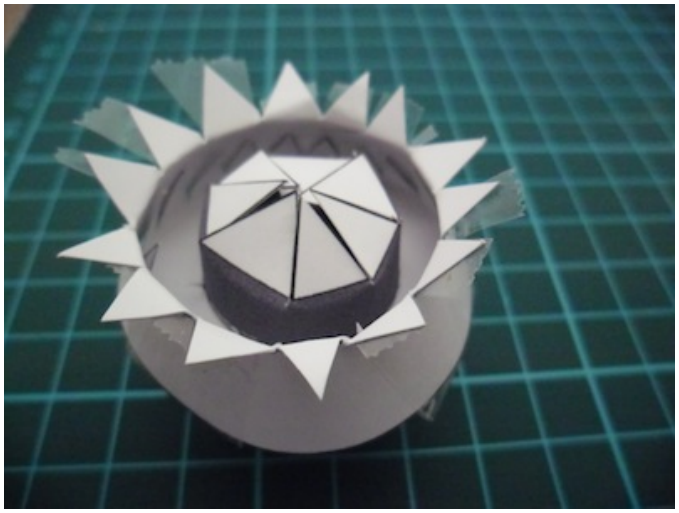
18. The two parts glued together. This will provide a solid structure for the engine to be attached.



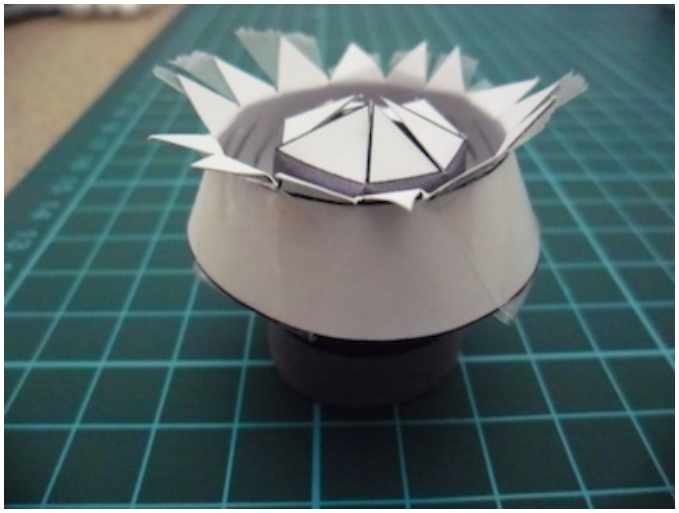
19. The next two parts that you need are the engine itself and the support circle (a blank circle).



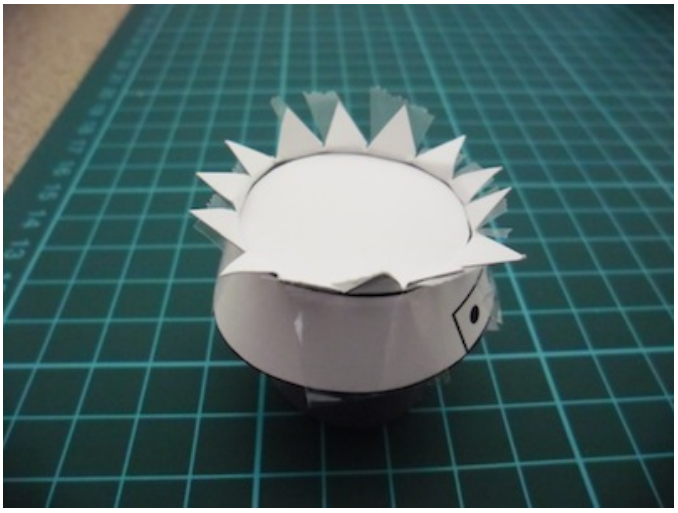
20. The engine is inserted into the engine support. As you can see, I have used sticky tape on this section.



21. This is what the engine should look like. This provides a large flat surface to glue a circular support.



22. The same parts from a lower angle.

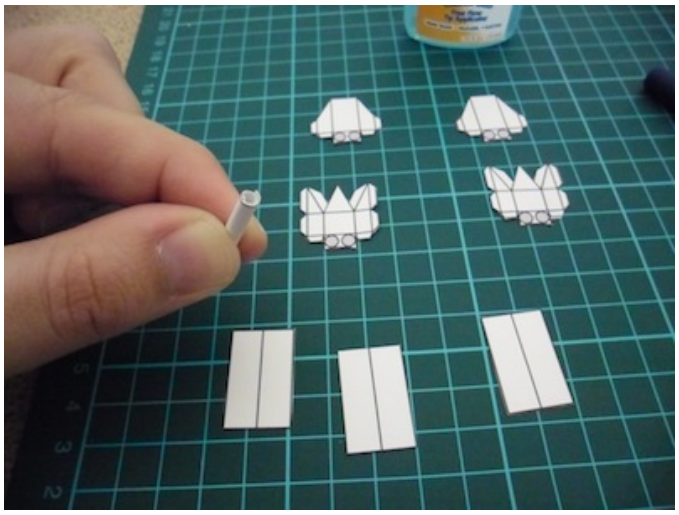


23. The circular support is glued to the top of the engine. This circle should just fit inside the top of the engine shroud, leaving the tabs free to bend.

24. The tabs of the engine shroud are then folded inward, ready to be glued to the main cylinder of the SRB.

25. Then glue the engine parts to the cylinder (good luck with that!).

26. Get the parts for the SRB hydraulics ready.

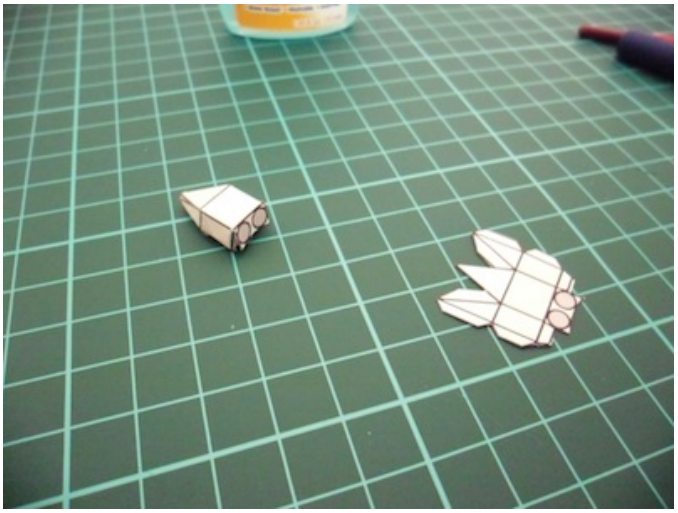


27. The small hydraulic cylinders for the exterior of the SRB. Roll tightly in the lengthwise position.

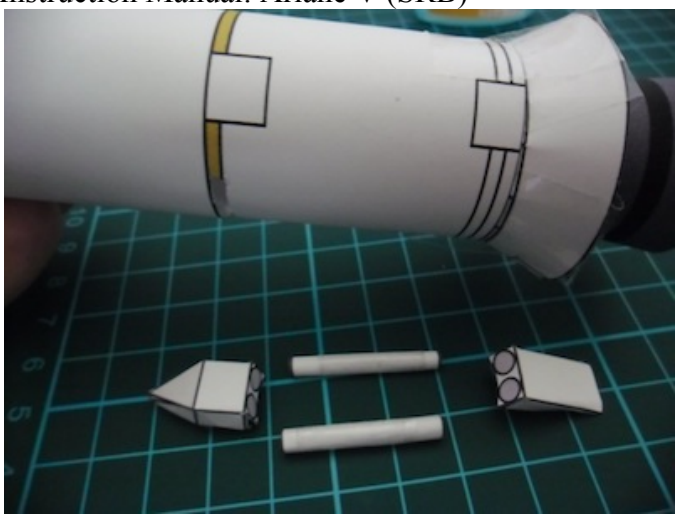
28. The support for the hydraulic cylinders will be glued to the support fairing at the base of the SRB.

29. Here is the same part… flat (right of the image) and assembled (folded and glued – left of the image).

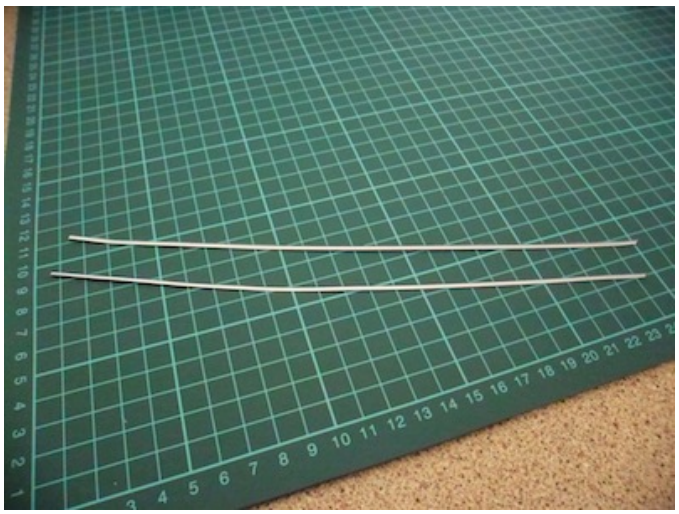
30. Here is upper support for the cylinders. Both parts shown are the same part… flat (left of the image) and assembled (folded and glued – right).



31. The same part(s), showing the two circles at the base of the part. The cylinders will be glued there.



32. The place where to glue the supports is clearly shown. The square portion of the part (left) is to be glued to the square on the left of the SRB.



33. The last two pieces to attach are the electrical conduit lines on the exterior of the SRB. These need to be glued vertically (i.e. top to bottom) of the main cylinder of the SRB – directly on the black lines.

Note: I cannot provide any additional assembly instructions because the SRB needs to be attached to a central core module of a larger booster rocket (another paper model). As such, the methods for attaching the SRB will be included in another Instruction Manual.

Also, I have since modified the parts sheet. There are glue tabs (triangles) on the top of the SRB cylinder, as well as a separate glue tab to connect the top cone to the cylinder. It is up to you as to which type of glue tabs would be easier to use … or would look better on the finished model.