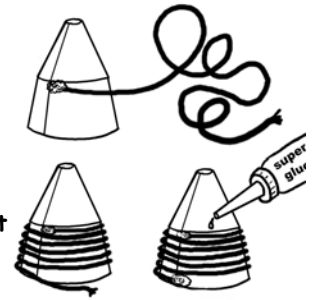
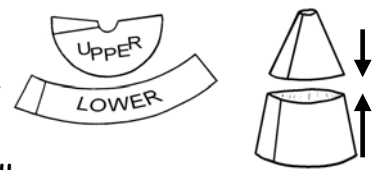


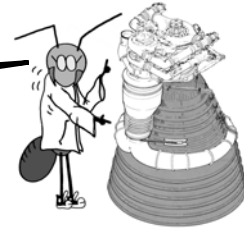
STEP 10 Making the F-1 engines.

To create the F-1 engines, cut the patterns from the wrap sheet. Form each into its cone shape and glue the upper on top of the lower as shown. Don't worry if the two pieces do not fit perfectly at the seam, all of that will soon be covered up. Simply make sure that the pieces are stacked somewhat evenly. This forms the shape of the F-1 engine bells. Your kit includes one extra bell assembly in case you break one while flying. We advise building the extra one now.

Next cut four lengths of line from that supplied in the kit. This line is made of 30# twisted Kevlar which means that not only will your engines be resistant to stray bullets, but you will also need a very sharp knife to cut the line. Make each length exactly 8 and 1/4 inches long. Using a small drop of glue, secure one end of the string to an engine bell right at the seams and allow it to dry as you repeat the process on the other engine bells. When the end of a string is secure, wind the string around the bell in a descending fashion as shown. When winding make sure that the string angles to the lower level at the bell seam and appears to be nearly straight in the front. This string, when the engine bell is painted, will give the illusion of the real F-1 engine's "hatbands." Apply a few drops of super glue to harden the whole thing. Gluing the engine bells to your fingers at this point will not enhance the performance of your rocket.



Now comes a really tricky part, giving the illusion of the engines turbine exhaust manifold. We tried all sorts of methods from carving wood to paper cutouts and we found that only one thing worked well... F.G.P.



STEP 10-a F.G.P. (Funky Glue Putty)

To make Funky Glue Putty, just take a drop of yellow wood glue or white glue (yellow works best), and rub it between your thumb and finger. Soon it will begin to thicken and get putty-like. Once you get the hang of it, make a BB sized piece of F.G.P. for each engine bell and roll each piece into the shape and size shown here. Mold it around the bell covering the seam and tamp a nice flat spot in the back where you can later glue in a 3/8 inch long piece of dowel to represent the turbo pump. Did we tell ya' about the 3/8 inch pieces of dowel? You'll need to cut four of them for this.



BEFORE sticking on the dowel, see step 10b below!

When it dries, the F.G.P. will pucker. This will only add to the effect once you paint the entire engine with is painted.

STEP 10b; subsection A- amendment WB1074. Makin' 'em look even more real

Cut four pieces of dowel each being 3/8 inch long, cut out the spooft strips on this page. Spread glue on one side of the spooft and then roll the spoofts onto one end of each dowel so that the the paper appears to taper toward the middle of the dowel. That will give the illusion of the heat exchanger of the F-1 engine. Next trim and glue the dowel onto the manifold. Once everything has dried, paint the engines with Testors 1180 "Steel" colored paint. Only an extremely close look will reveal that you have created an illusion. Generally your rocket will be moving too fast or be stuck too high in the power lines or the top of a tree for anyone to get that close of a look.

