

BIG BULLET

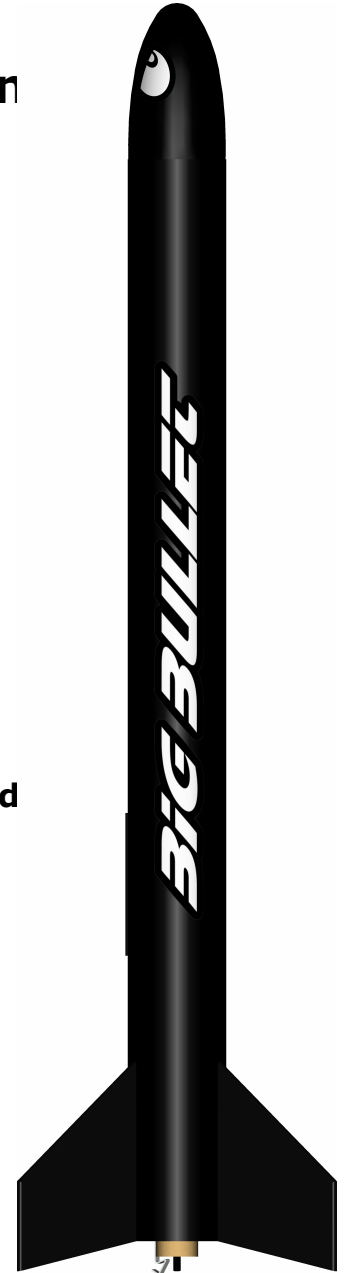
Assembly Instruction

Parts Included:

- 1 Nose Cone
- 1 Body Tube
- 3 Balsa Fins
- 1 Thrust Ring
- 1 Motor Tube
- 1 Motor Hook
- 1 Motor Sleeve
- 2 Centering Rings
- 1 Launch Lug
- 1 Kevlar Shock Cord (yellow)
- 1 Elastic Shock Cord
- 1 12" Plastic Parachute
- 1 Decal Sheet

Materials Needed (not Included)

- Pencil
- Ruler
- White or Yellow Wood Glue
- Sanding Sealer
- Paint Brush
- Sandpaper (#240 grit)
- Glossy Black Spray Paint
- Primer Spray Paint

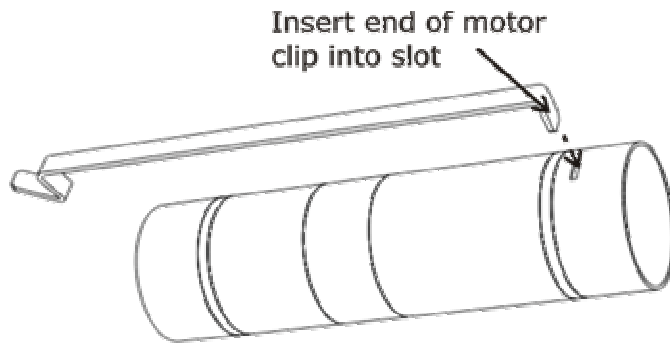


Motor Mount and Shock Cord Assembly

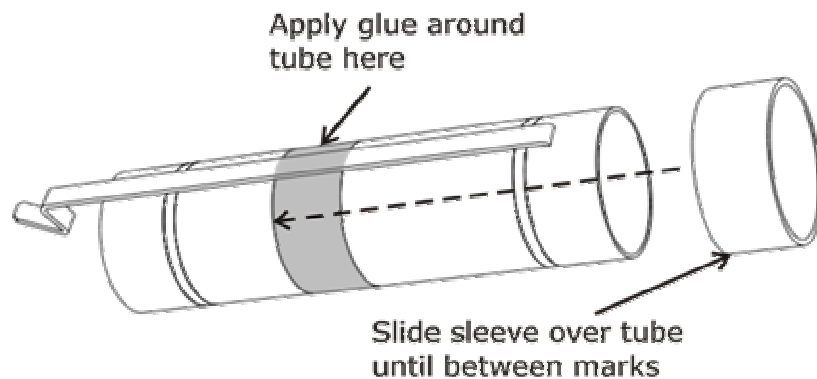
Step 1 – Tie the end of the elastic shock cord to the kevlar shock cord with both ends together in one looping knot.



Step 1 – Insert the flat end of the metal motor hook into the pre-cut slot $\frac{1}{4}$ " from the end of the motor tube.

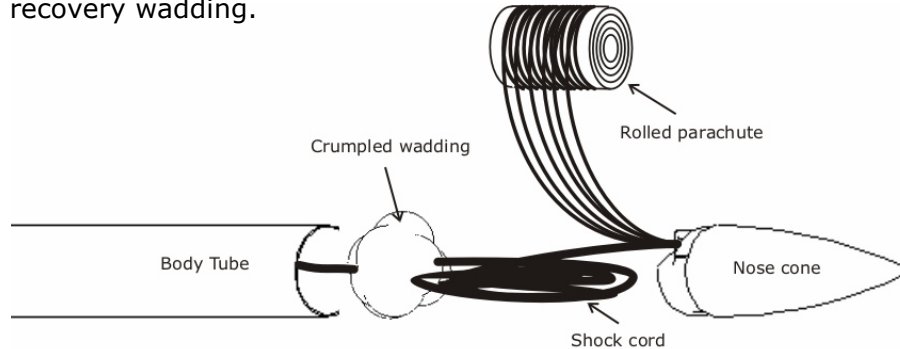


Step 2 – While holding the motor hook in the slot, apply glue around the motor tube between the wide marks. Push the motor sleeve over the motor hook until the ring is between the wide marks on the motor tube.



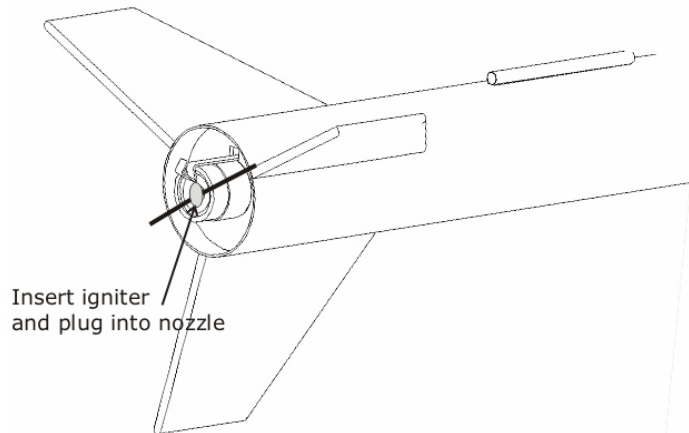
Flying Your Rocket

Step 1 – Insert several crumpled sheets of recovery wadding into the lower body tube and the folded shock cord after the recovery wadding.



Step 2 – Insert the folded parachute into the lower body tube, then insert the payload section to complete the recovery assembly.

Step 3 – Insert the rocket motor with the nozzle end facing the rear of the rocket.

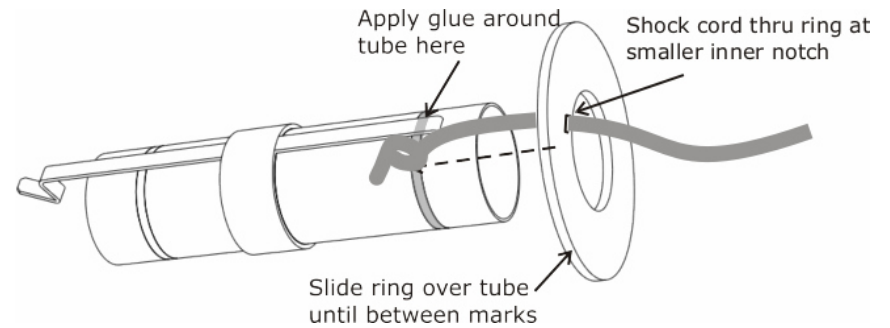


Step 4 – Install model rocket motor igniter according manufacturers recommended procedure.

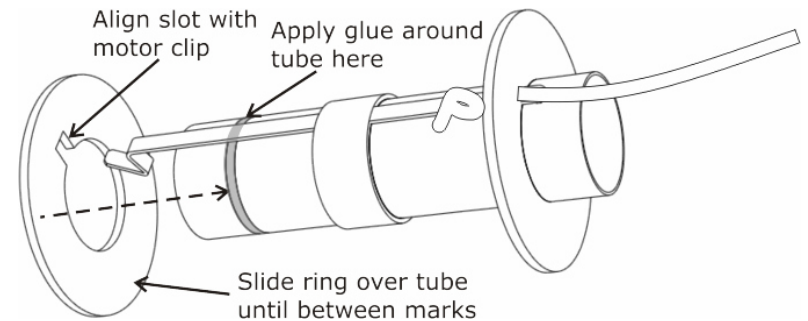
IMPORTANT: FOLLOW THE N.A.R. SAFETY CODE REGARDING LAUNCHING AND THE USE OF MODEL ROCKET MOTORS

Step 3 – Tie a single knot in the end of the yellow Kevlar shock cord opposite the end the elastic shock cord is attached to.

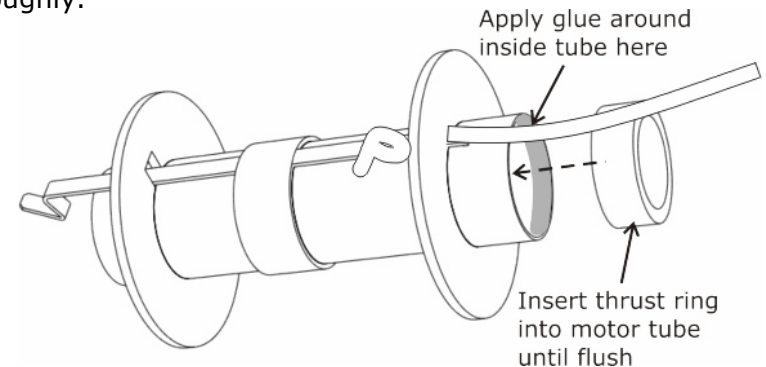
Step 4 – Apply glue around the motor tube between the marks near the top of the tube. With the shock cord thru the small notch of the centering ring, slide centering ring over the motor hook and the knot in the Kevlar shock cord until it is between the marks.



Step 5 – Apply glue around the motor tube between the marks near the bottom of the tube. Push the centering ring with the larger slot over the motor hook until it is between the marks.



Step 6 – Apply glue around the inside of the top end of the motor tube and push the thrust ring in until against the motor hook and flush with the end of the motor tube. Set aside to dry thoroughly.

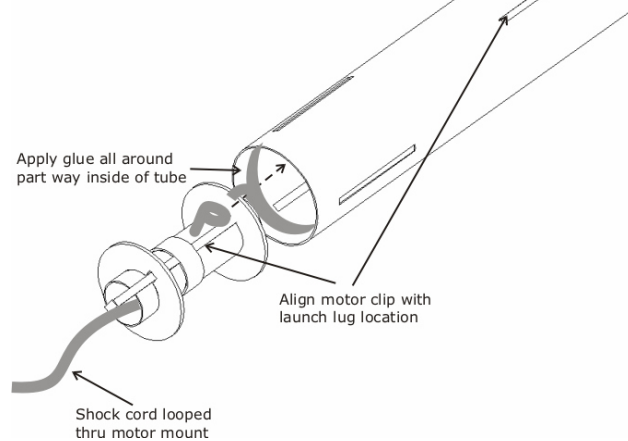


Motor Mount Attachment

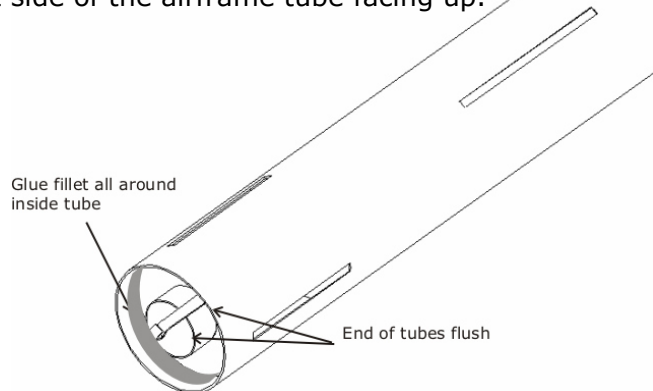
Step 1 – Loop the shock cord thru the inside front and out the inside rear of the motor mount.

Step 2 – Apply glue all around the inside of the lower body tube between the start of the fins slots and the bottom end of the body tube.

Step 3 – Insert the motor mount and push in until the bottom end of the motor mount tube is flush with the bottom end of the lower body tube. Make sure the motor hook is oriented on the same side as the launch lug location marks on the tube. Set aside to dry.

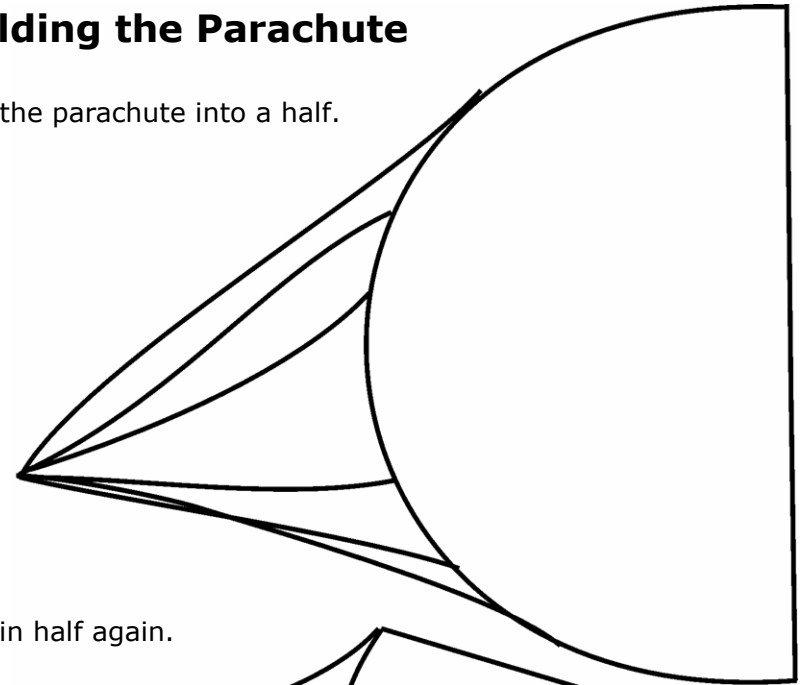


Step 4 – Pull the shock cord back thru the body tube and out the top of the body tube. Apply a glue fillet at the centering ring and body tube attachment joint. Set aside to dry with the motor mount side of the airframe tube facing up.

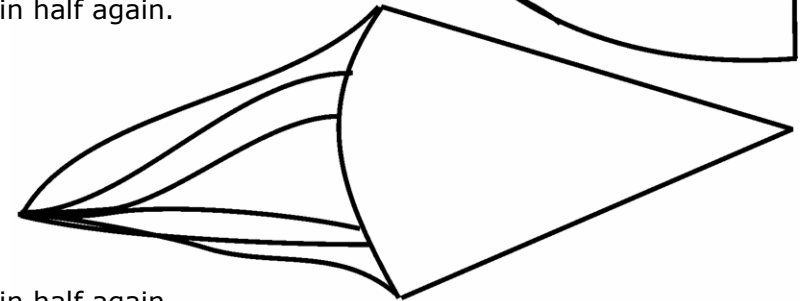


Folding the Parachute

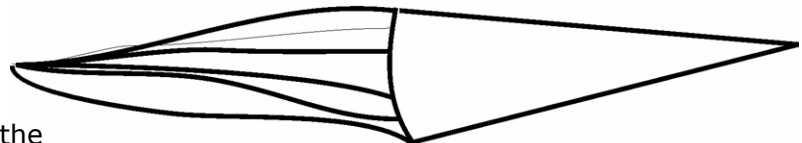
Fold the parachute into a half.



Fold in half again.



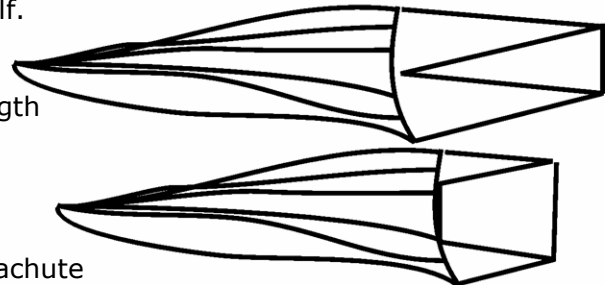
Fold in half again.



Fold the length in half.

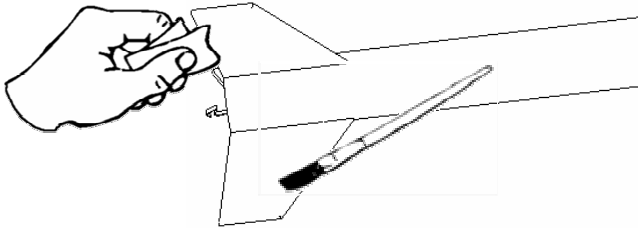
Fold the length once more.

Roll the parachute onto the shroud lines. Do not twist or wrap the shroud lines.



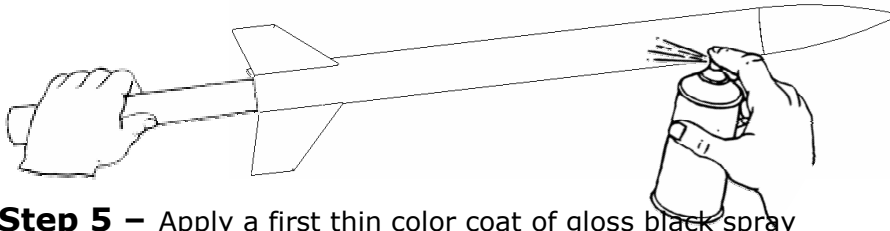
Finishing Your Rocket Before Final Assembly

Step 1 – Using 240 grit sandpaper, sand the fins of the rocket lightly to remove loose grain and sand the nose cone so that the paint will stick.



Step 2 – Apply sanding sealer to the fins and let dry. Sand the fins with 240 grit sandpaper between coats of sanding sealer. Re-do this process until the fins are smooth and the wood grain is filled.

Step 4 – Insert a dowel into the bottom of the rocket body tube to hold your rocket, apply a thin coat of gray primer spray enamel using even back and forth movements. Let the primer dry and sand using 240 grit sandpaper. Re-coat and sand as necessary.



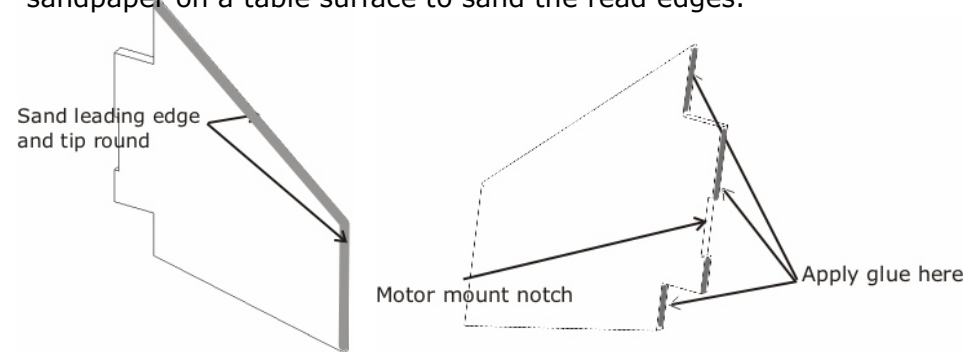
Step 5 – Apply a first thin color coat of gloss black spray enamel using even back and forth movements. Let the first coat tack up for a few minutes. Then follow up with a heavier coat. Do not coat too heavily or the paint will sag. The best results are obtained when the color coat is just thick enough to gloss.

Let dry for 24 hours.

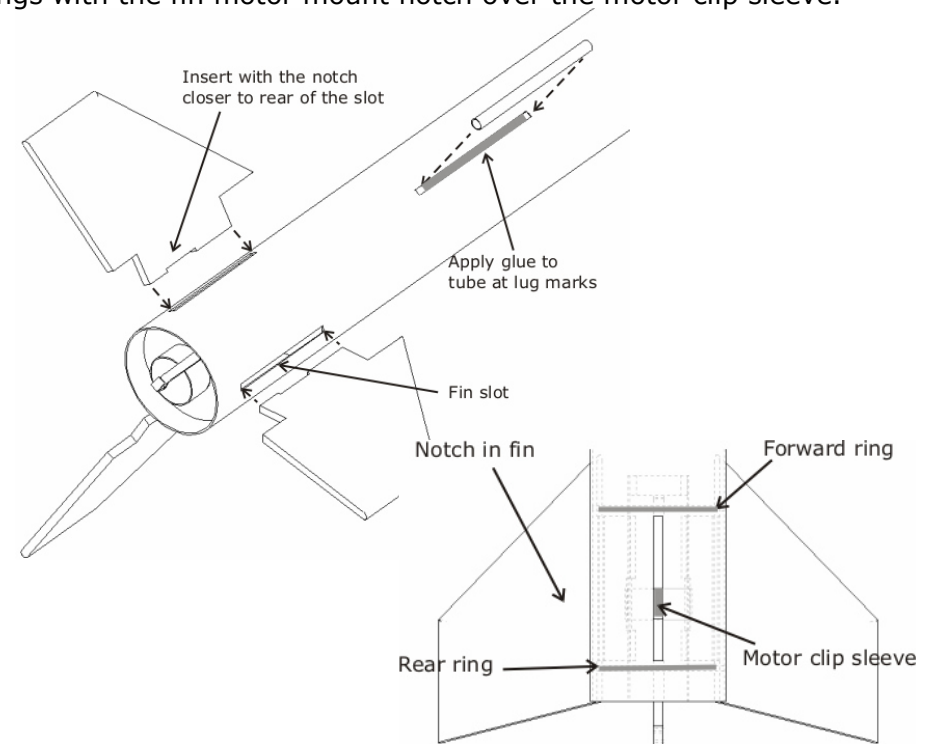
Step 6 – Remove the pressure sensitive decals from the backing paper and apply to the fins and body tube. Use the picture on the cover of this manual or the kit color card for a guide to decal placement.

Fins & Launch Lug Attachment

Step 1 – Using 120 grit sandpaper, sand all 3 fins front edges and tips round. Then, using 220 grit sandpaper, sand the flat surfaces and edges smooth. Do not round the rear edges of the fins. However you can sand these smooth by placing the sandpaper on a table surface to sand the rear edges.

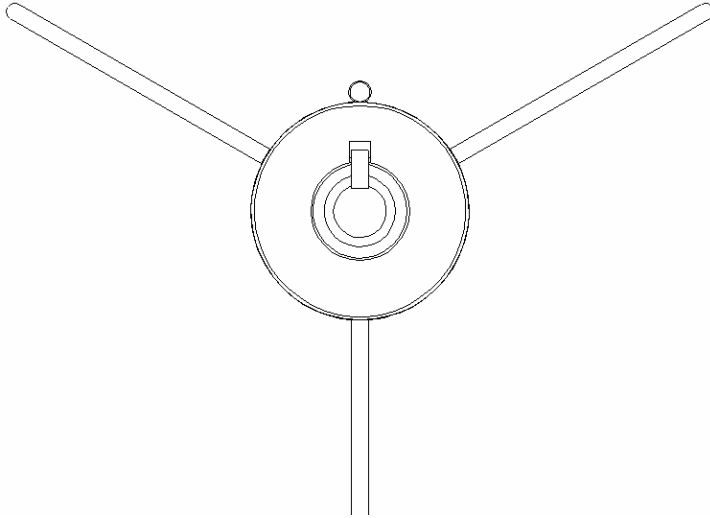


Step 2 – Apply glue to the root edge and tab of each fin and place each fin into the fin slots near the bottom of the body tube. The fins should be against the motor tube between the centering rings with the fin motor mount notch over the motor clip sleeve.

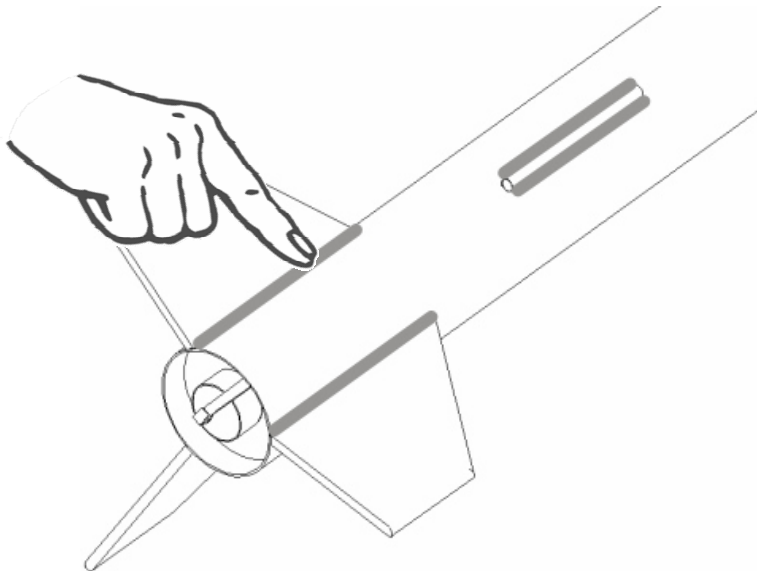


Preparing and Attaching the Fins Cont...

Step 3 – Keep the fins and the launch lugs aligned while drying. Sight thru the ends of the launch lugs to make sure they are aligned with each other. Keep the fins perpendicular to the body tube at 120 degrees apart as pictured below.



Step 4 – After the fins and launch lug have dried, apply a thin layer of glue between the body tube and the fins, and the body tube and both launch lug with your finger to create a fillet that will strengthen the fins and launch lugs. Set aside to dry.



Assembling the Parachute and Nose Cone

Step 1 – Cut out and assemble the parachute kit according to the instructions printed on the parachute.

Step 2 – Tie the elastic shock cord to the nose cone with a double overhand knot.

Step 3 – Tie the parachute to the nose cone with a double overhand knot.

Tie parachute and shock cord to nose cone

