

NIKE-SMOKE ASSEMBLY INSTRUCTIONS



Prod. No. 3502

Skill Level Three



Things You'll Need To Assemble this Kit:

Hobby Knife and Pencil

Sandpaper (220 or 320 Grit)

White Glue

Aliphatic Resin glues work best such as TITEBOND or ELMER'S CARPENTER'S WOOD GLUE - ELMER'S WHITE SCHOOL GLUE also works but dries slower.



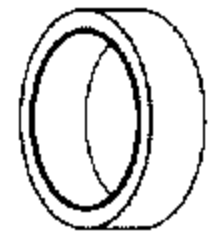
Plastic Cement

Use TESTORS TUBE Plastic Cement, PACTRA LIQUID CEMENT or other comparable brands. DO NOT use cyanoacrylate glue.



Tape

Scotch Magic Tape or Paper Masking Tape

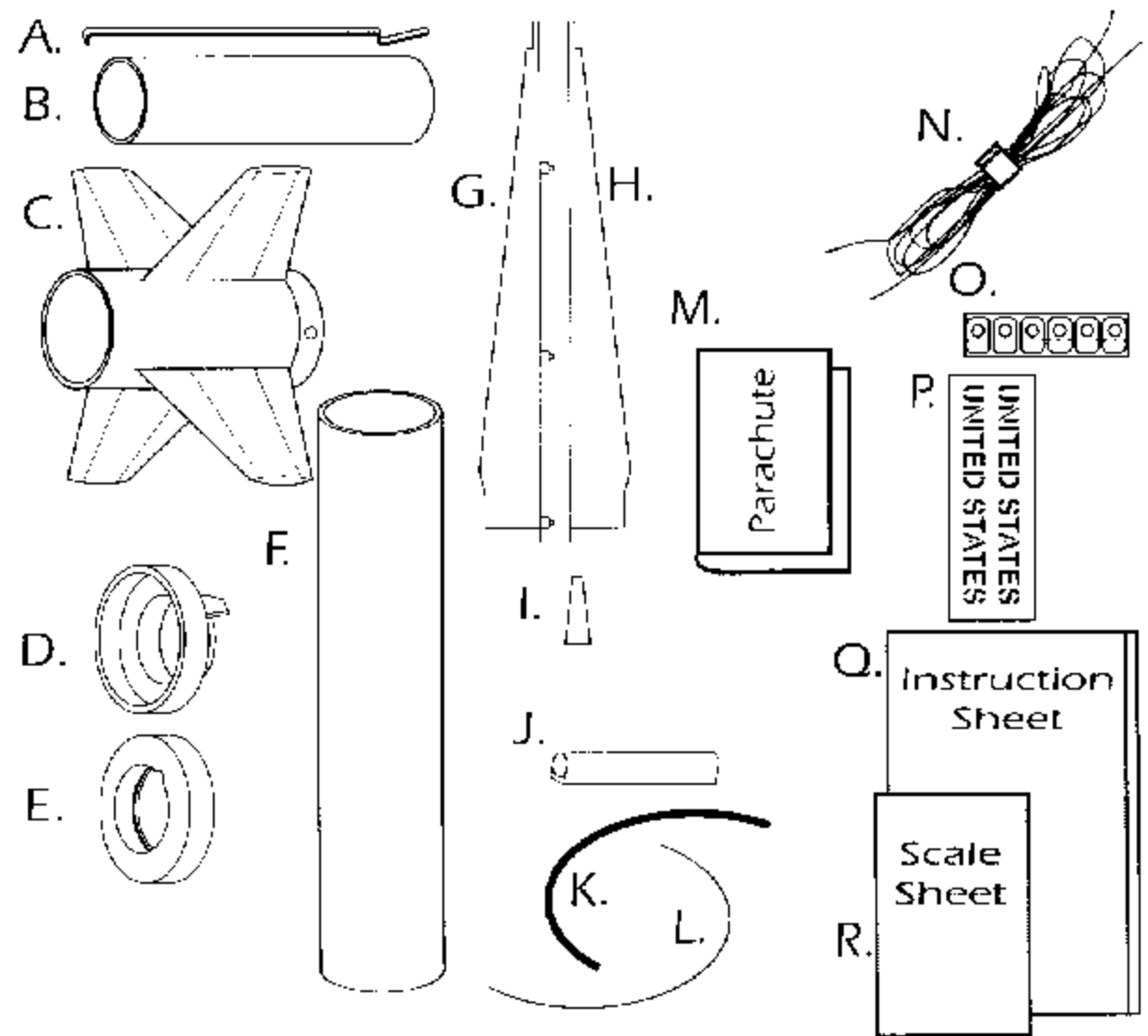


BEFORE STARTING ASSEMBLY READ THROUGH THESE INSTRUCTIONS. IT IS BEST TO TEST FIT ALL PARTS BEFORE APPLYING ANY GLUE. READ AND FOLLOW THE NAR MODEL ROCKET SAFETY CODE.

PARTS LIST

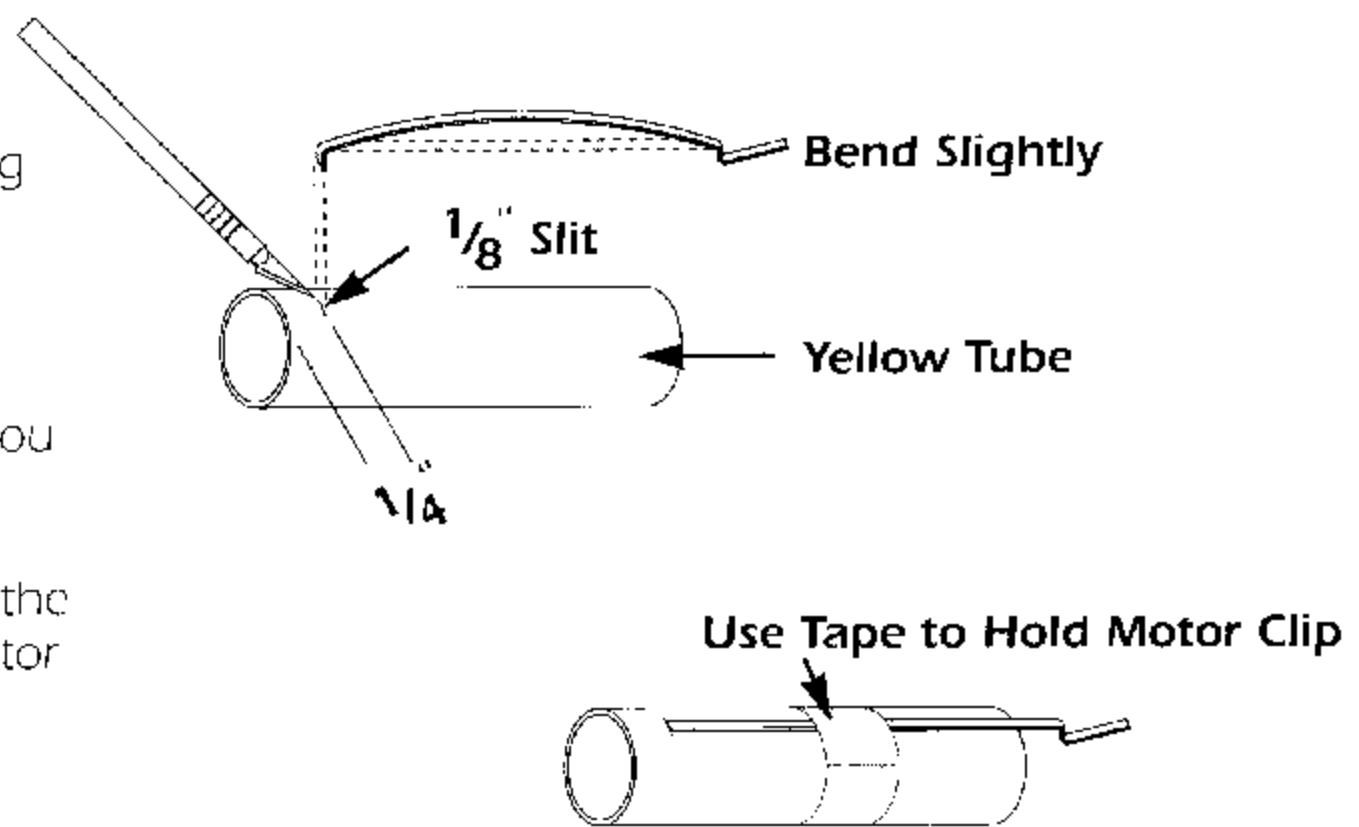
- A. 49000 Motor Clip
- B. 10303 Yellow Motor Mount Tube
- C. 21553 Plastic fin Unit
- D. 21554 Forward Ring
- E. 21555 Aft Ring (Rear)
- F. 11500 8.5 inch Body Tube
- G. 20201 Plastic Nose Cone Male
- H. 20202 Plastic Nose Cone Female
- I. 20203 Nose Cone Tip
- J. 27001 Plastic Launch Lug
- K. 50051 18 inch Yellow Kevlar® Shock Cord
- L. 50012 24 inch White Elastic Shock cord
- M. 28102 12 inch Parachute
- N. 50100 Pack of 3-26 inch Shroud Lines
- O. 28001 Strip of 6 Gripper Tabs
- P. 91507 Decal
- Q. 96007 Instruction Sheet
- R. 96107 Scale Sheet

* Kevlar is a registered trademark of Dupont.



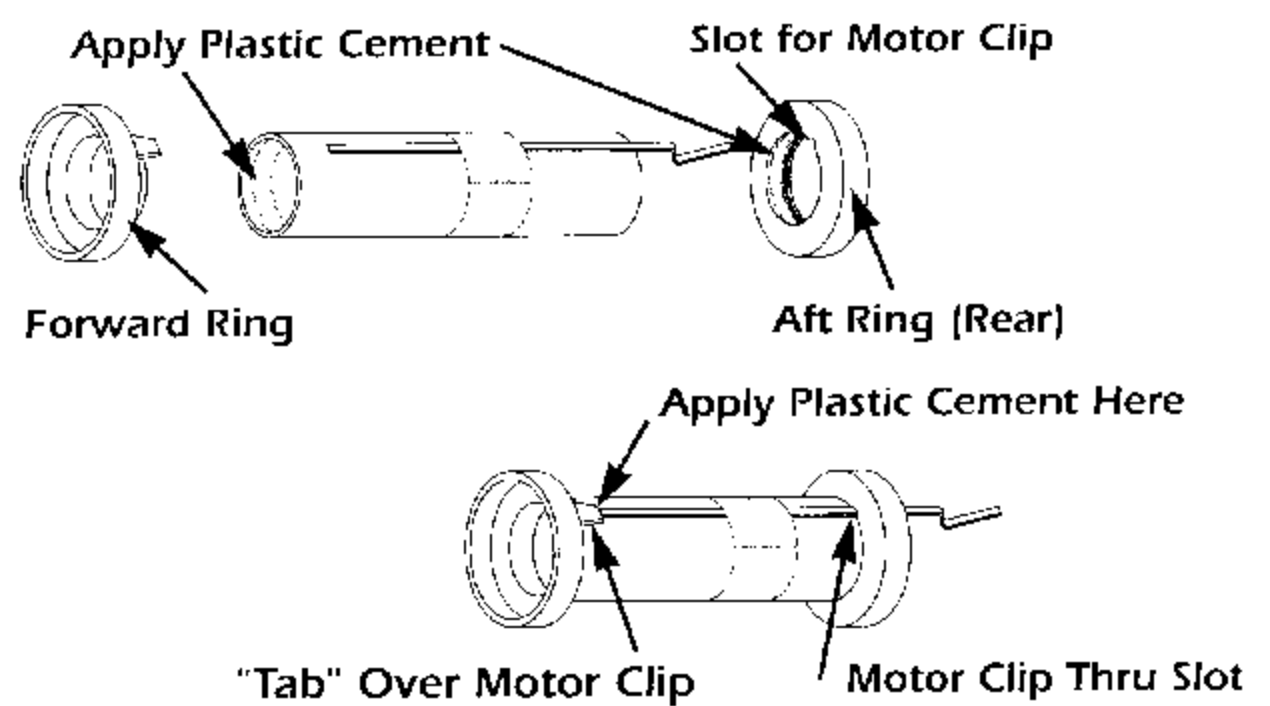
STEP 1

- A. Use a hobby knife to make a 1/8 inch long slit 1/4 inch from one end of the Yellow motor mount tube.
- B. Make a slight bend in the motor clip as shown. Insert the motor clip into the slit you made in the Yellow motor mount tube.
- C. Wrap a piece of tape all the way around the Yellow motor mount tube to hold the motor clip in place.



STEP 2

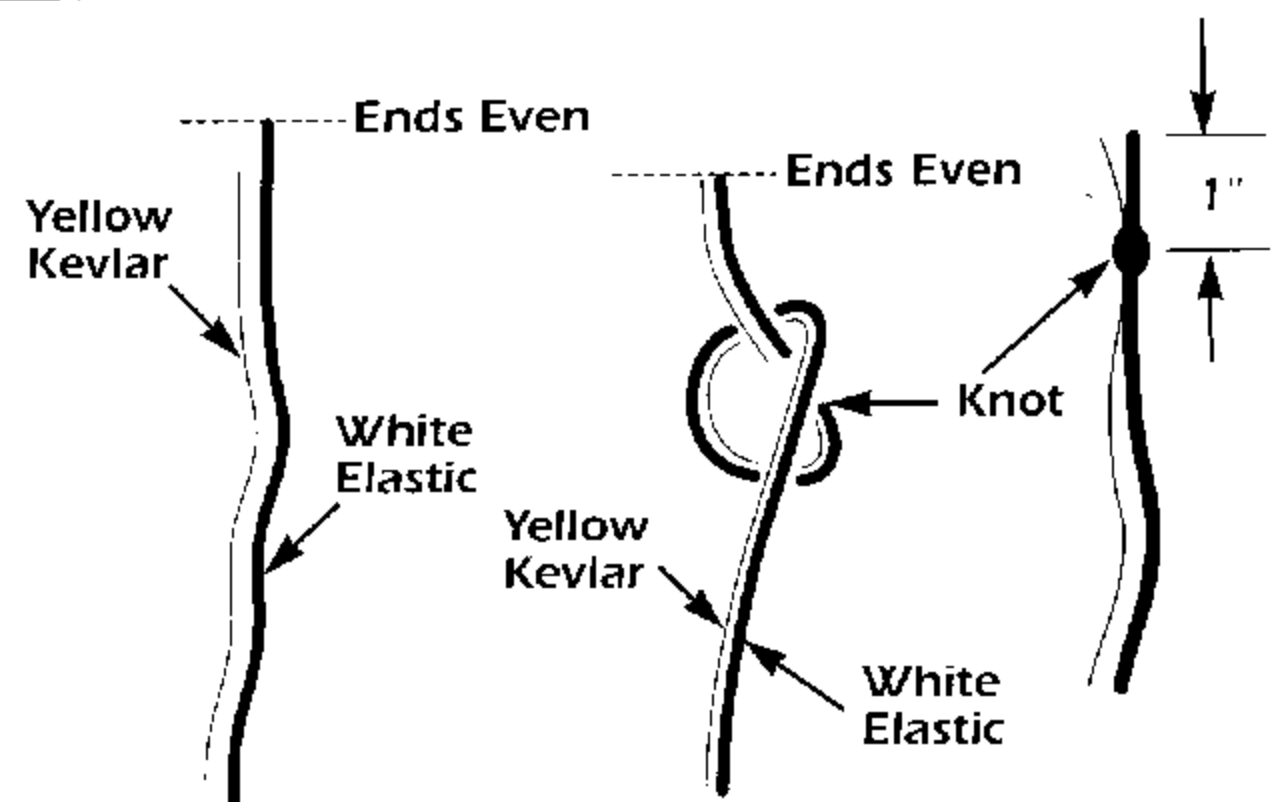
- Apply plastic cement around inside edge of Yellow motor mount tube as shown.
- Insert the forward molded centering ring into the Yellow motor mount tube and position it so the molded "tab" is over the motor clip.
- Apply plastic cement around inside edge of the aft molded centering ring.
- The aft molded centering ring has a slot for the motor clip. Be sure to slide the ring onto the Yellow motor mount tube so that the slot fits over the motor clip.
- Apply additional plastic cement to the forward ring/motor/clip/yellow motor mount tube joint as shown.



STEP 3

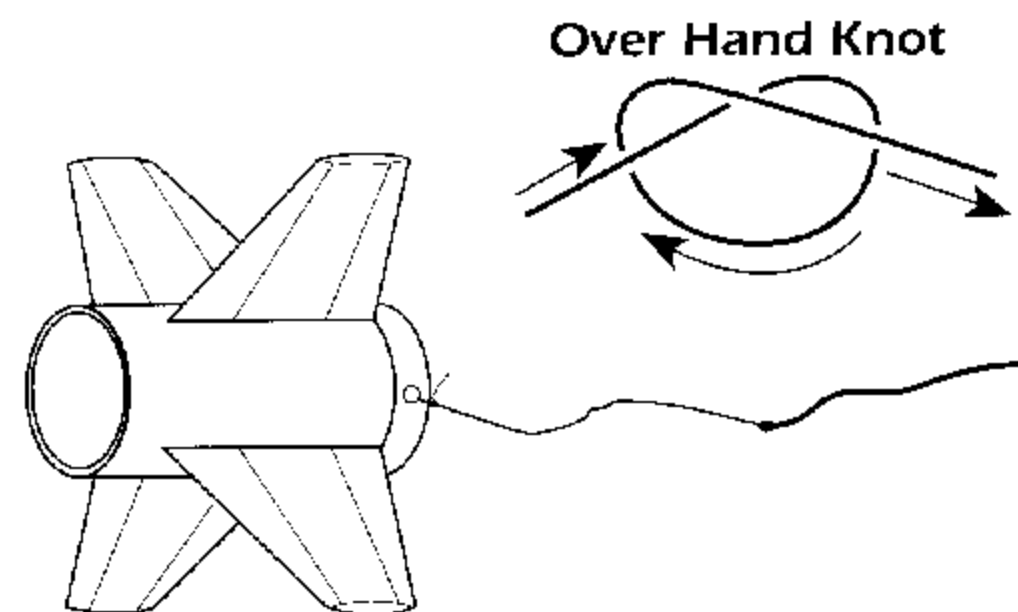
- Hold the Yellow Kevlar Shock Cord and the White Elastic Shock Cord side by side. Pull one end of each cord so that they are even with each other. While holding the two cords together, tie a single parallel overhand knot approximately one inch in from the even ends as shown.
- Gently pull on both cords to set the knot and prevent it from slipping.
- Apply a small amount of white glue on the ends of both cords to prevent them from fraying.

NOTE: THIS IS A VERY IMPORTANT STEP. IF YOU TIE A DIFFERENT TYPE OF KNOT THE SHOCK CORDS MAY SEPARATE DURING FLIGHT.



STEP 4

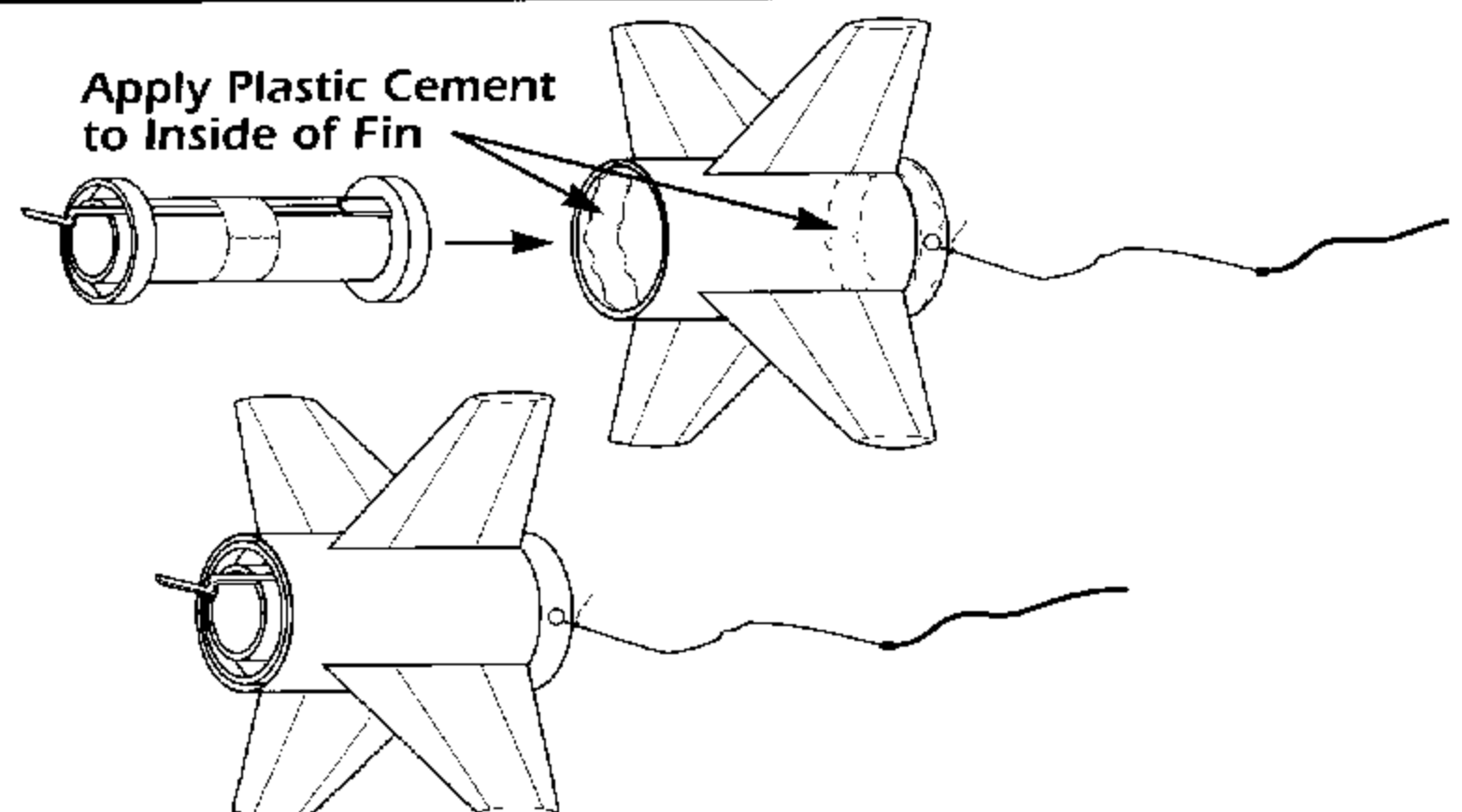
- Use two overhand knots to tie the Kevlar shock cord onto the molded plastic fin unit as shown.
- Trim any plastic "flash" from the fin unit with a sharp hobby knife.



STEP 5

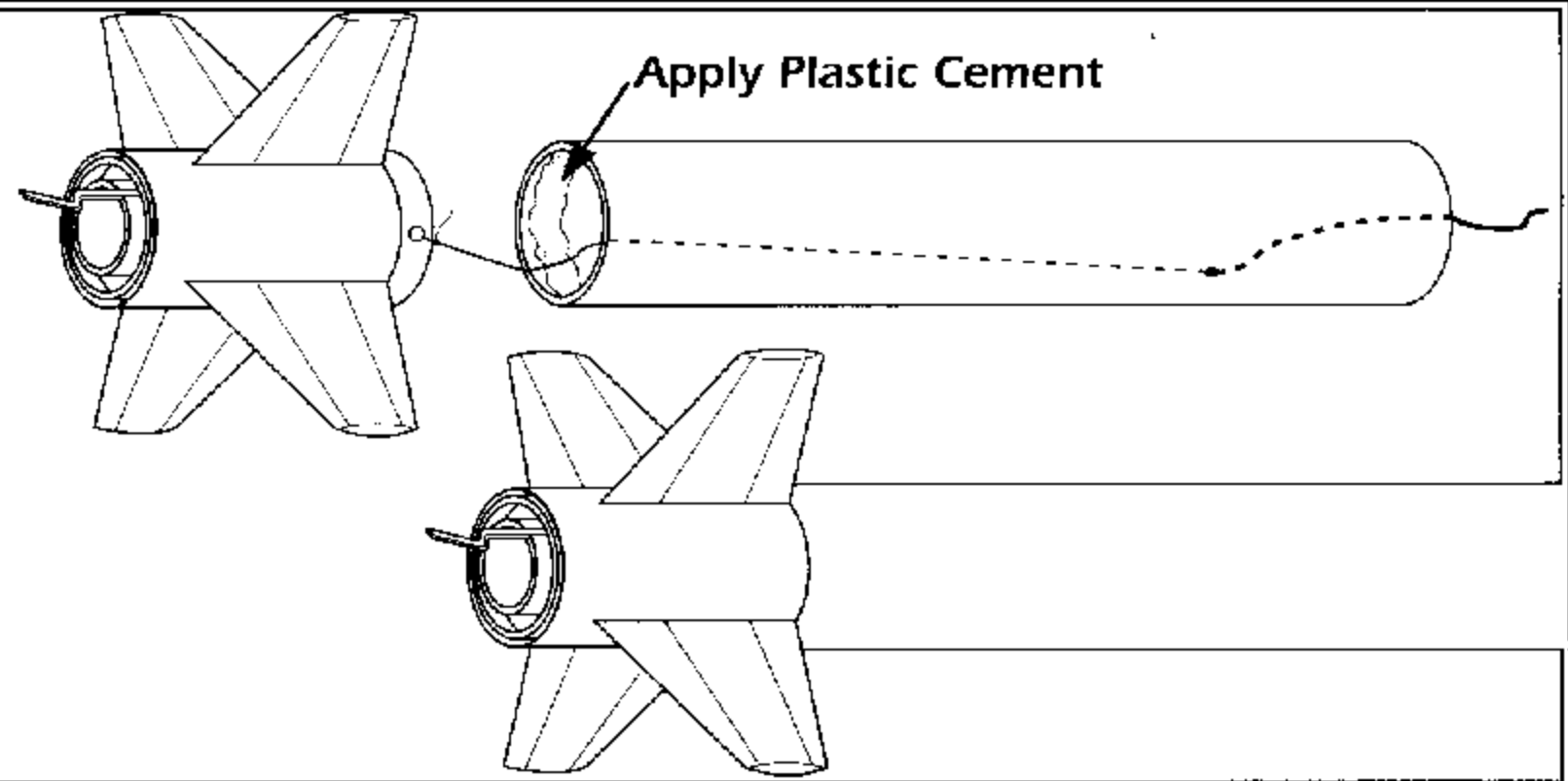
- Apply plastic cement around inside edge of both ends of the molded plastic fin unit.
- With motor clip facing the rear, slide the motor mount assembly into the molded plastic fin unit as shown. Wipe away any excess glue.

NOTE: Be sure motor mount assembly is oriented with the motor clip facing the rear as shown.



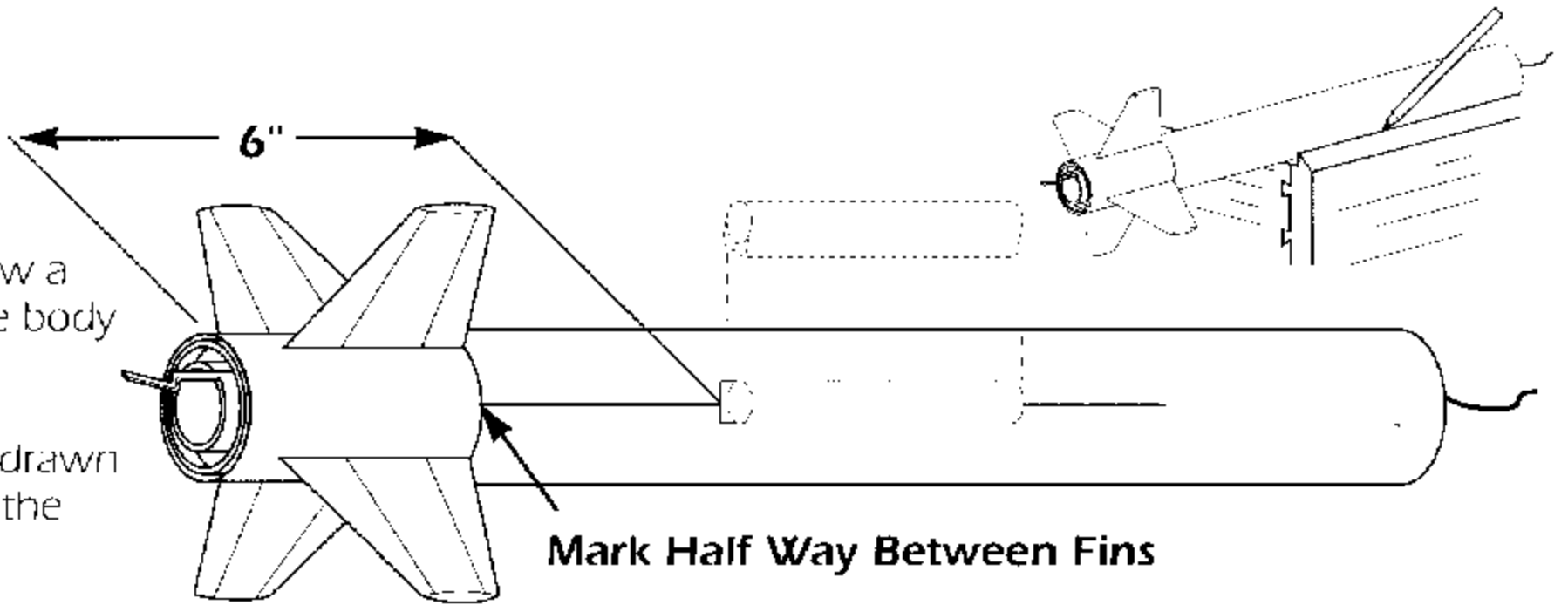
STEP 6

- "Feed" the shock cord into the White body tube until the cord comes out the other end.
- Apply plastic cement around the inside of the White body tube.
- Insert the molded plastic fin unit/motor mount assembly into the White body tube. Pull shock cord all the way through the body tube. Wipe away any excess glue.



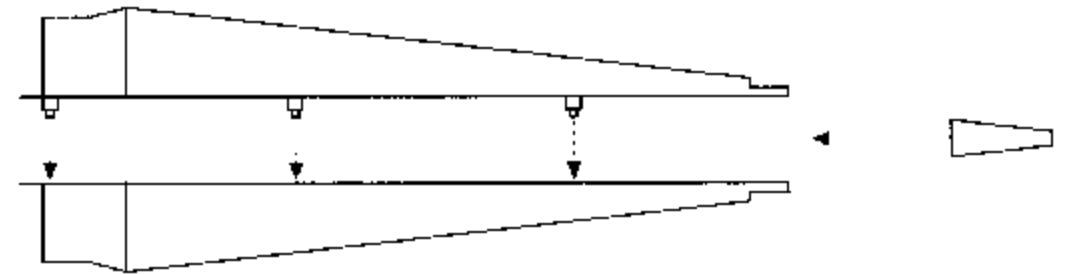
STEP 7

- Make a pencil mark on the body tube half-way between two fins.
- Use a drawer edge as a guide and draw a light pencil line down the length of the body tube.
- Make a pencil mark on the line you've drawn on the white body tube 6 inches from the aft end of the rocket as shown.
- Apply plastic glue to the launch lug and place the launch lug along the pencil line with one end even with the mark 6 inches from the aft end of the rocket as shown.
NOTE: Be sure launch lug is lined up straight along the white body tube.



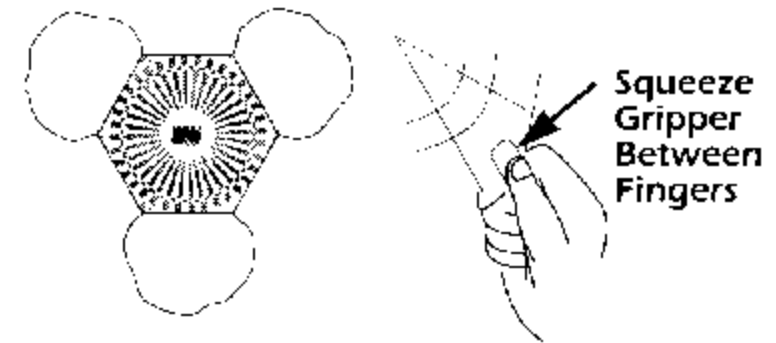
STEP 8

- Trim all plastic "flash" from the molded nose cone parts. Apply plastic model cement around the inside edge of one of the nose cone halves.
- Glue the two nose cone halves together and hold together with tape until glue dries.
- Apply plastic cement to the inside of the nose cone tip and glue it onto tip of nose cone.



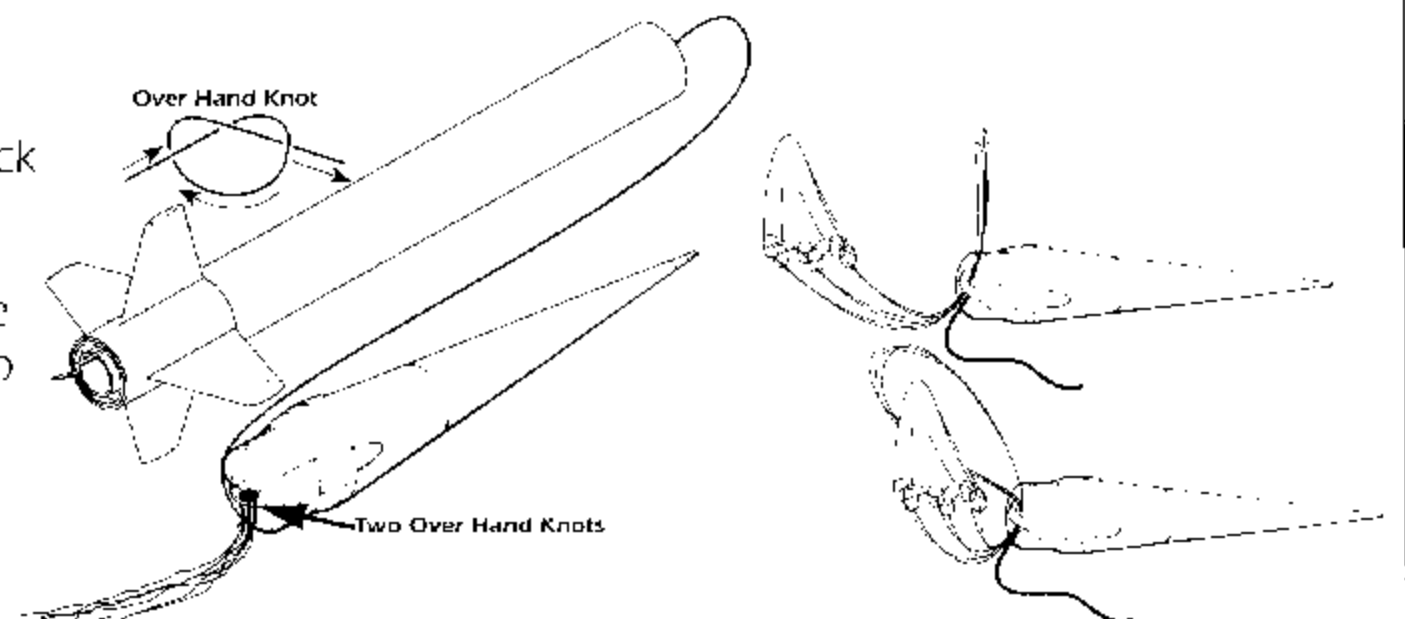
STEP 9

- Assemble the parachute according to the instructions printed on it.
- Firmly squeeze each gripper tab and parachute between your fingers.



STEP 10

- Use two overhand knots to tie the loose end of the shock cord onto the eyelet in the reducer.
- Pass the shroud line loops of the parachute through the eyelet on the reducer. Pass the parachute through the loop ends and pull lines tightly against the eyelet.



STEP 1 1 Use this picture and the scale data sheet as your guide for painting and decal placement.

- A. Spray paint the entire rocket flat white. Mask off and paint the fins as shown.
- B. Use your hobby knife to cut out the decals. Make a smooth continuous cut all the way through the backing sheet. Cut out names and words as a block. Small knicks can cause the decal to tear as you peel it off the backing sheet.
- C. Carefully peel off each decal (hold small decals with a pair of tweezers). Dip decals into a bowl of warm water containing a drop of dish wash detergent. Position the decal on the rocket. Use a tissue to gently press air bubbles out from under the decal. After all decals are positioned and have dried, spray the entire rocket with a coat of clear gloss.



FLYING YOUR NIKE-SMOKE ROCKET

WHAT ELSE YOU WILL NEED:

To successfully fly your rocket you will need the following items:

- QUEST Launch Pad (No. 7600)
- QUEST Launch Controller (No. 7500)
- QUEST Parachute Recovery Wadding (No. 7020)
- QUEST Rocket Motors, Type B6-4 C6-5
- Use a B6-4 Motor for your first flights.

ESTIMATED ALTITUDES

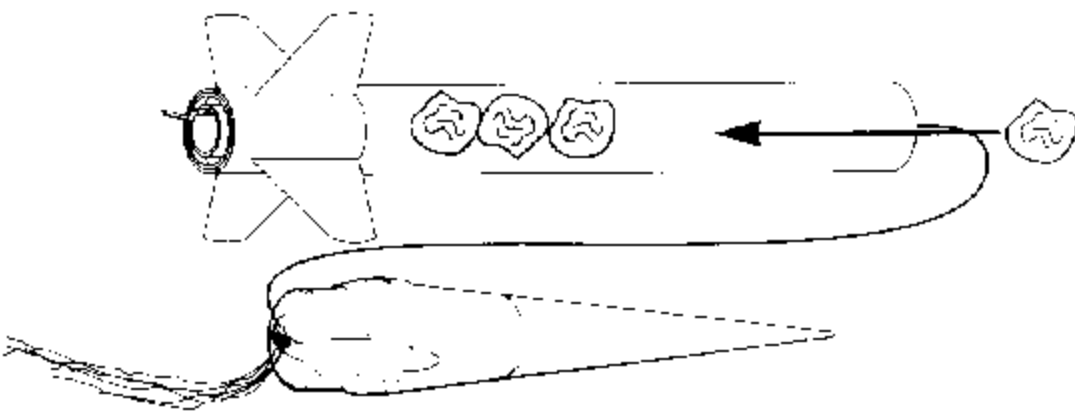
The following is a guide to assist you in determining which motor to use based on the wind conditions and size of flying field available.

MOTOR	ESTIMATED ALTITUDE
B6-4	250 FEET
C6-5	650 FEET

PREPPING YOUR ROCKET FOR FLIGHT

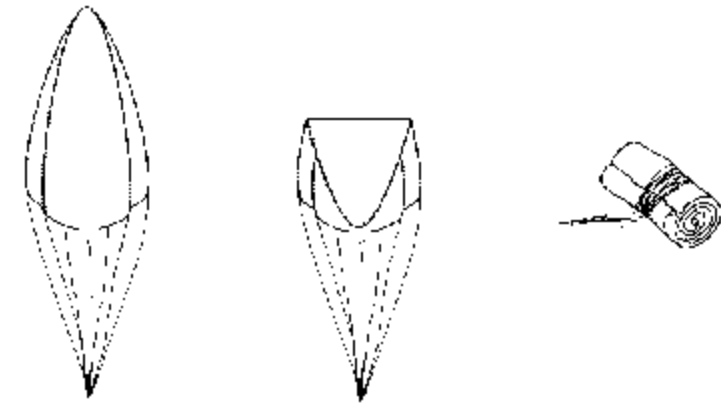
STEP 1

Pull the shock cord all the way out of the body tube. Crumple four sheets of recovery wadding and insert one by one into the body tube making sure that the Knot between the Kevlar and white elastic shock cord is on the nose cone side of the wadding. Wadding should fit loosely in the tube but tight enough to form a good seal against the wall of the body tube.



STEP 2

- A. Grab the parachute at its center and allow the rocket to hang from it. The weight of the rocket will pull the parachute into several triangular shapes.
- B. Gather the triangles together into one flat triangle.
- C. Fold the top of the parachute down over itself once.
- D. Now continue to roll the parachute over itself and roll the shroud lines around it.



STEP 3

- A. Pack the parachute into the body tube. **THE PARACHUTE MUST SLIDE EASILY INTO THE TUBE.** If it is a tight fit, remove and re-fold the parachute.
TIP: LIGHTLY DUST YOUR PARACHUTE WITH TALCUM OR BABY POWDER TO KEEP IT FROM DEVELOPING A SET SHAPE. THIS TECHNIQUE IS ESPECIALLY EFFECTIVE IF THE WEATHER IS HOT AND HUMID OR VERY COLD.
- B. Push the shock cord into the tube and re-fit the nose cone onto the rocket. **BE CAREFUL NOT TO CATCH ANY OF THE SHOCK CORD BETWEEN THE SHOULDER OF THE NOSE CONE AND THE BODY TUBE.**

READ AND FOLLOW THE ENCLOSED LAUNCHING PROCEDURES SHEET

READ AND FOLLOW THE N.A.R. SAFETY CODE DURING ALL YOUR MODEL ROCKETRY ACTIVITIES.



IRONCLAD GUARANTEE

If for any reason, you are not totally satisfied with our product, QUEST will provide whatever you think is fair, from refund to replacement.



Manufactured by:

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Phoenix, AZ 85080-2390