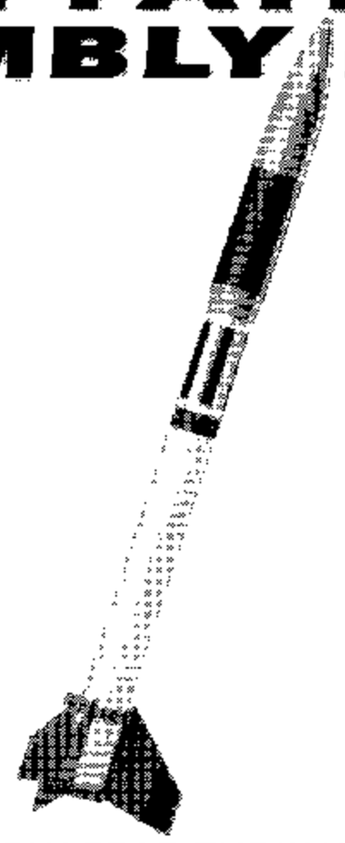
Q E-Z PAYLOADER™ ASSEMBLY INSTRUCTIONS

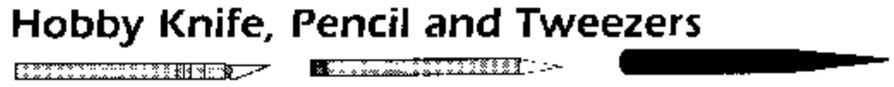
QUEST™

Prod. No. 1009
Skill Level One

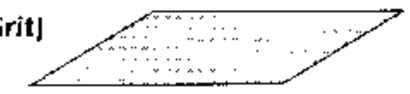


Things You'll Need To Assemble this Kit:

Hobby Knife, Pencil and Tweezers



Sandpaper (220 or 320 Grit)



White Glue

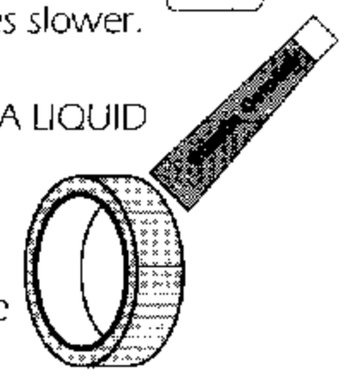
Aliphatic Resin glues work best such as TITEBOND or ELMER'S CARPENTER'S WOOD GLUE - ELMER'S WHITE SCHOOL GLUE also works but dries slower.

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.** 14000 Blue Thrust ring
- **C.** 10303 Yellow Motor Mount Tube
- **D.** 14020 Blue Centering Ring
- **E.** 11404 Yellow Body Tube
- **F.** 11403 Yellow Payload Tube
- **G.** 11506 Black Payload Tube
- **H.** 21574 Upper Plastic Fin Ring
- **I.** 21575 Lower Plastic Fin Ring
- **J.** 21573 Plastic Fins (3)
- **K.** 21576 Plastic Launch Lug (2)
- **L.** 21056 Large Plastic Reducer
- **M.** 21067 Plastic Tube Coupler
- **N.** 20209 Plastic Nose Cone
- **O.** 50012 24 Inch White Elastic Shock Cord
- **P.** 50052 21 Inch Yellow Kevlar Shock Cord
- **Q.** 28102 12 Inch Parachute (2)
- **R.** 50100 Pack of 3-26 Inch Shroud Lines
- **S.** 28001 Strip of 6 Gripper Tabs (2)
- **T.** 91514 Decal
- **U.** 96017 Instruction Sheet
- **V.** 96117 Launch Procedures Sheet

* Kevlar is a registered trademark of Dupont

PARTS NOT TO SCALE

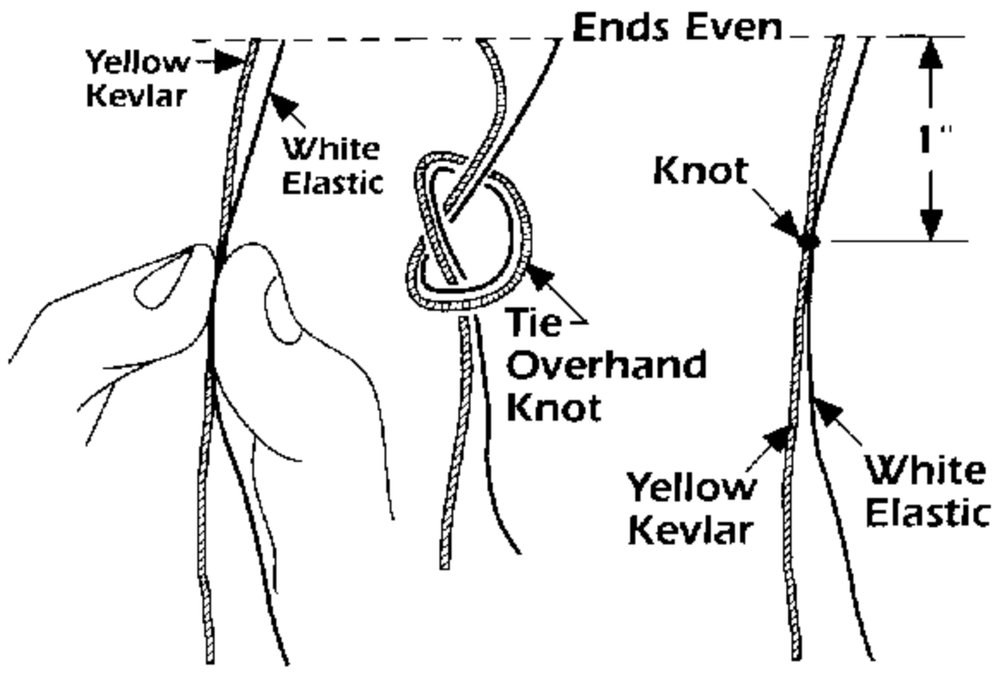
STEP 1

A. 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.

B. Whole holding the two cords together, tie a single overhand knot approximately 1 inch (2.5cm) from the even ends as shown.

C. Gently pull on both cords to set the knot and prevent it from slipping.

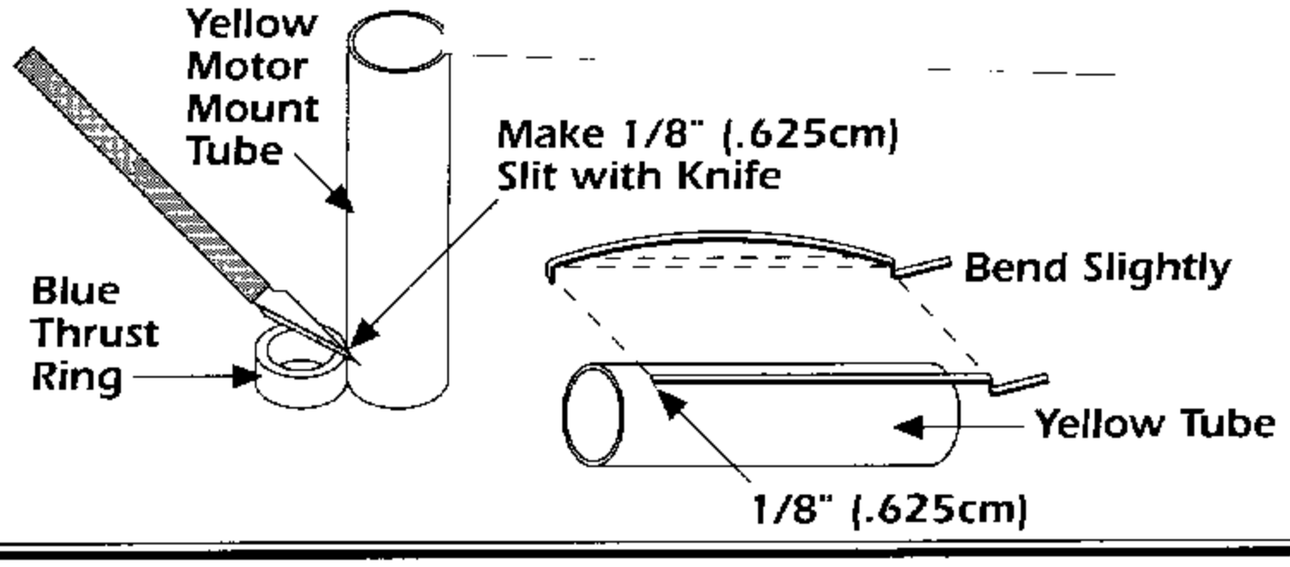
NOTE: THIS IS A VERY IMPORTANT STEP. IF YOU TIE A DIFFERENT KNOT THAN SHOWN, THE TWO CORDS MAY SEPARATE DURING FLIGHT.



STEP 2

A. Place the Blue Thrust Ring up against the side of the Yellow Motor Mount Tube and use it as a guide for your knife to make a small 1/8 inch (.625cm) long slit in the side of the Yellow Motor Mount Tube as shown.

B. Make a slight bend in the motor clip as shown. Insert the clip into the slot you made in the Yellow Motor Mount Tube.

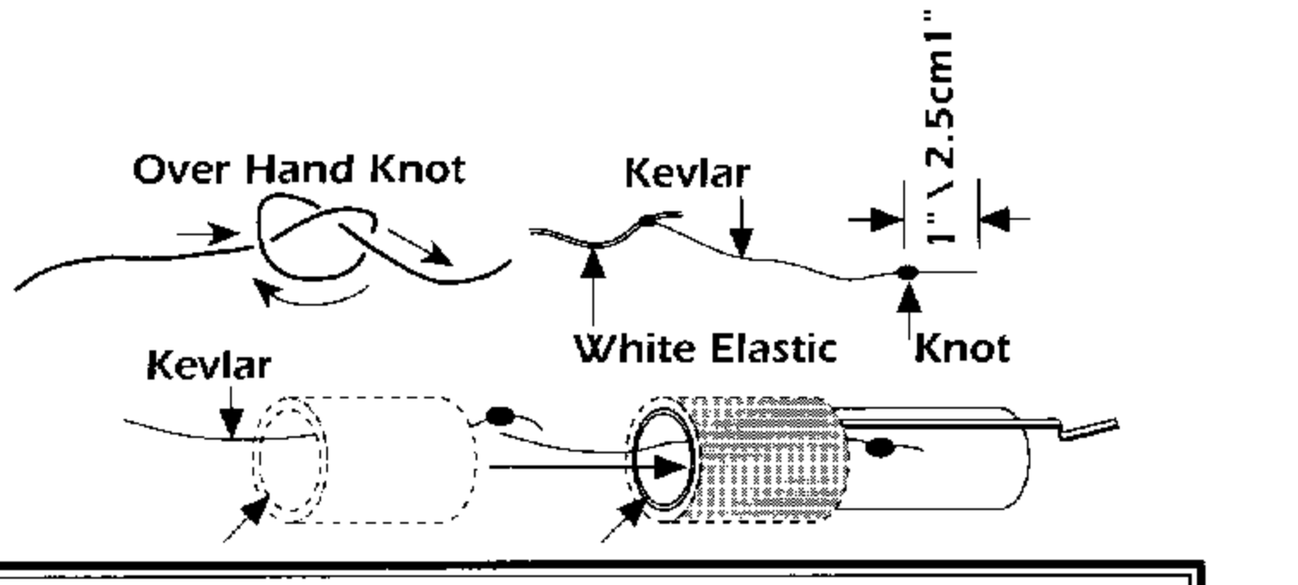


STEP 3

A. Tie a overhand knot approximately 1inch (2.5cm) from the end of the Yellow Kevlar Cord.

B. Pass the end of the Kevlar with the knot through the Blue Centering Ring.

C. Slide the Blue Centering Ring with the Kevlar under it onto the Yellow Motor Mount Tube until it is even with the end of the Yellow Tube.

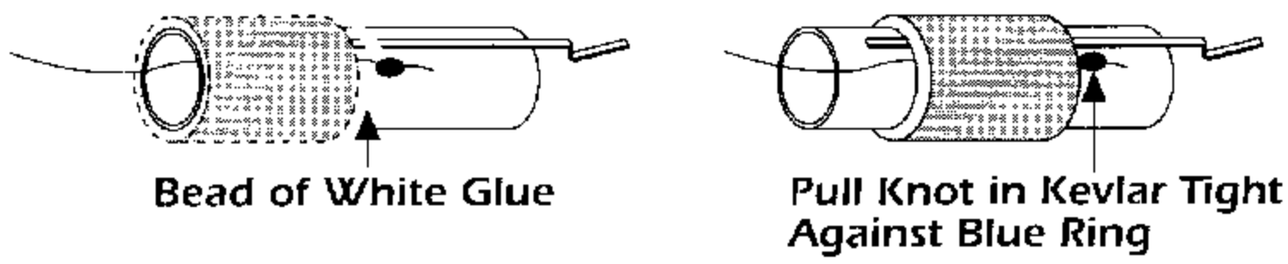


STEP 4

A. Apply a bead of white glue around the Yellow Motor Mount Tube just forward of the Blue Ring as shown.

B. Slide the Blue Ring into the bead of glue until the Blue Ring is approximately centered on the Yellow Tube. Wipe away any excess glue.

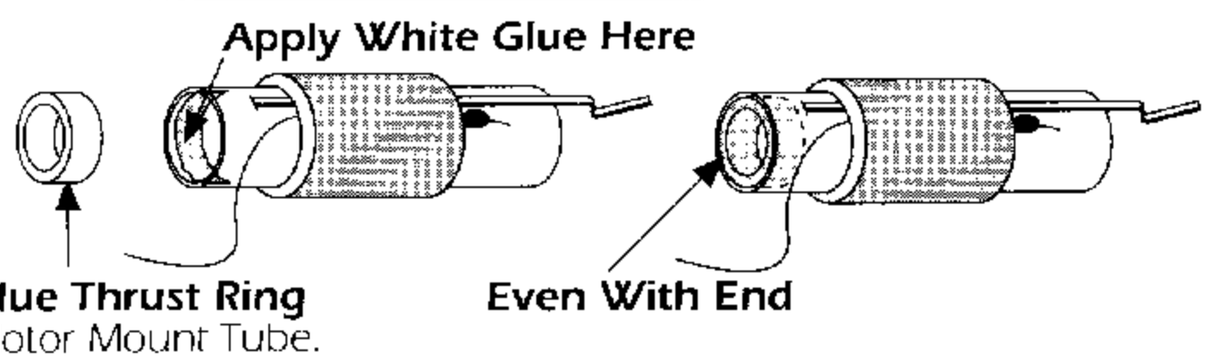
C. Pull the Yellow Kevlar Cord up tight against the Blue Centering Ring.



STEP 5

A. Apply white glue around inside edge of Yellow Motor Mount Tube as shown.

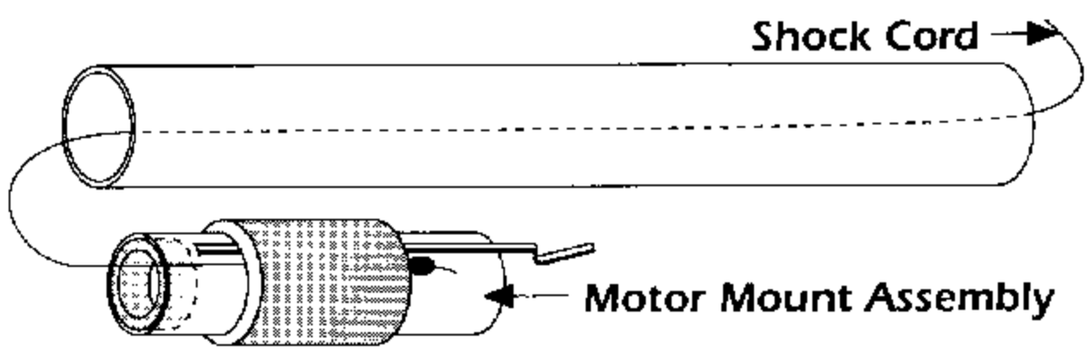
B. Insert the Blue Thrust Ring into the Yellow Motor Mount Tube so it is even with the end of the Yellow Motor Mount Tube.



STEP 6

A. Hold the Yellow Body Tube and "feed" the shock cord into the tube until the cord comes out the other end.

B. Grab the end of the shock cord and pull it all the way through the tube until the Motor Mount Assembly attached to the other end pulls up against the tube.

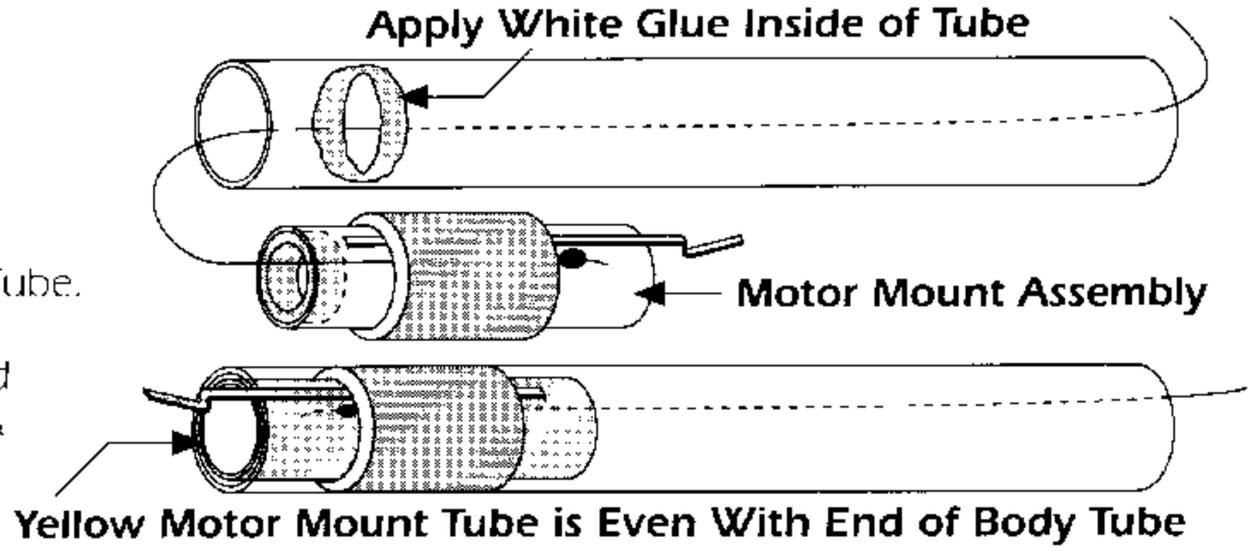


STEP 7

A. Hold the Motor Mount Assembly and the Body Tube in one hand.

B. Apply White Glue around the inside of the Body Tube.

C. Immediately insert the Motor Mount Assembly and PUSH IT INTO THE BODY TUBE WITH ONE FAST & SMOOTH MOTION until the Yellow Motor Mount Tube is even with the end of the Body Tube.



STEP 8

A. Use a sharp hobby knife to remove any "flash" from the plastic fin parts.

B. Lightly sand the inside surface of each of the two fin unit rings. Test fit the rings onto the Yellow body tube. Rings should slide easily over the Yellow tube.

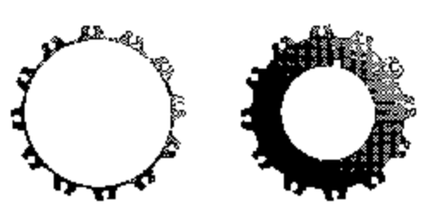
STEP 9

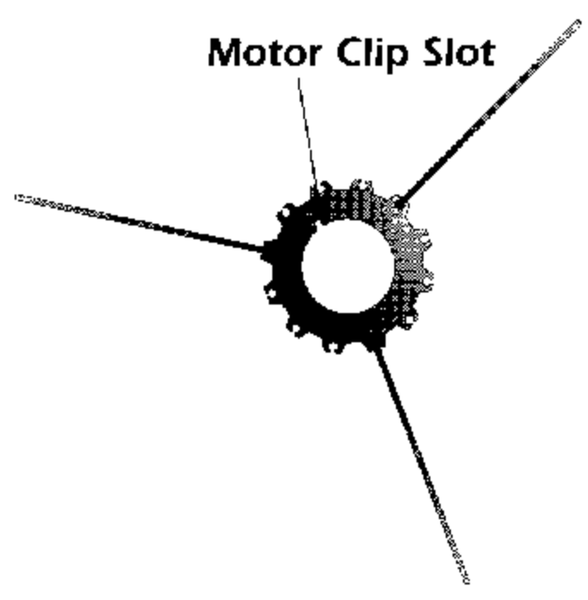
A. Locate and identify the lower fin unit ring.

B. Locate the pre-molded slot for the motor clip in the lower fin unit ring. Insert one of the molded plastic fins into one of the slots in the lower fin unit ring so that the motor clip will be positioned between two fins.

C. Skip three slots and insert another molded plastic fin into a slot in the lower fin unit ring.

D. Skip three slots and insert the remaining molded plastic fin into the lower fin unit ring.

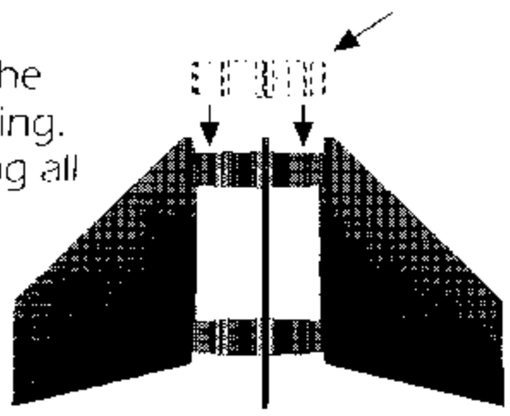


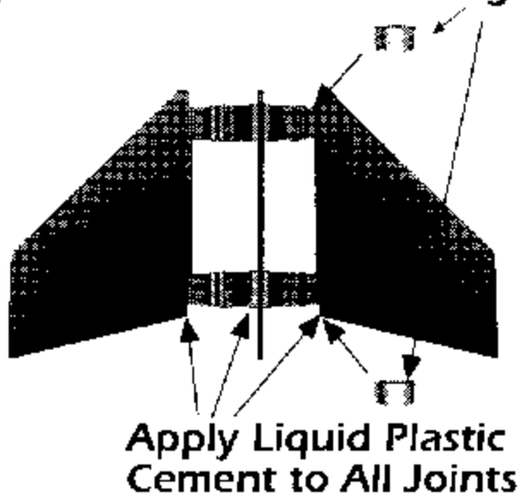


STEP 10

A. Carefully line-up the upper fin unit ring with each of the three fins by barely inserting each fin into the upper ring. When all three fins are properly inserted, press the ring all the way down onto the three fins as shown

B. Insert one of the molded launch lugs into a slot between two fins in the lower fin unit ring. Insert the second launch lug into the corresponding slot in the upper fin unit ring.



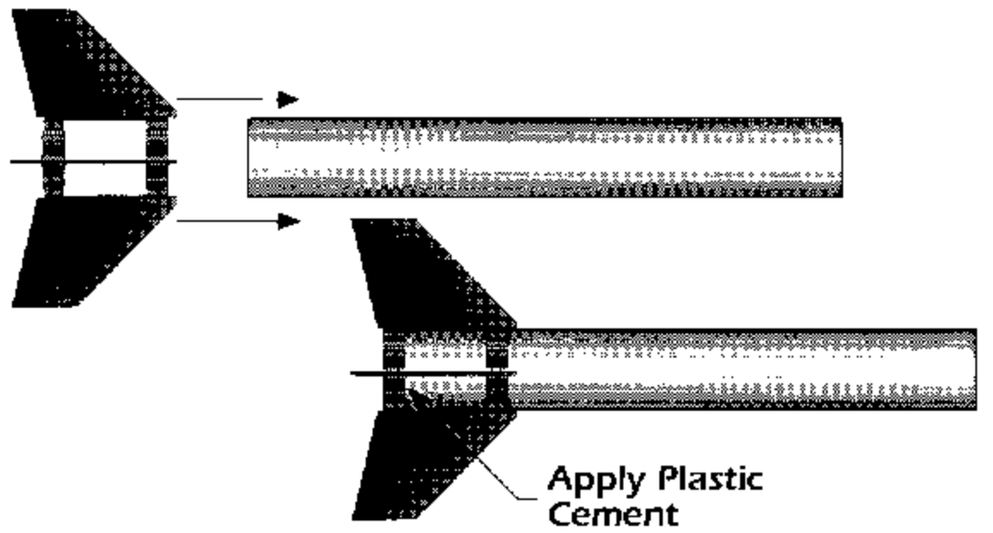


C. Apply liquid plastic cement to each of the fin/ring joints on the completed fin unit. Set aside to dry.

STEP 11

A. Carefully slide the plastic fin unit assembly from the rear of the Yellow Body Tube. Align the motor clip with the molded slot in the lower fin unit ring.

B. Apply a small amount of plastic cement to the lower fin unit Ring/Body Tube joint to hold the fin unit assembly permanently in place.

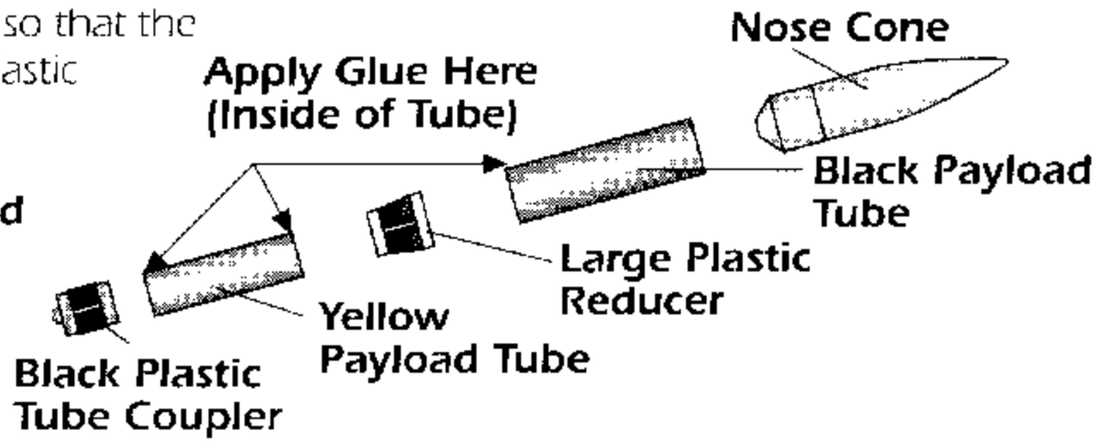


STEP 12

A. Apply tube type plastic cement around the inside edge of both ends of the Yellow Payload Tube. Insert the Black Plastic Tube Coupler so that the end with the eyelet faces out as shown. Insert the Large Plastic Reducer into the other end as shown.

NOTE: If you want to have access to the Yellow Payload Tube. Do Not Glue The Large Plastic Reducer. Use Shoulder Shims to create a tight fit.

B. Apply tube type plastic cement into one end of the Black Payload tube. Insert the Large Plastic reducer as shown.



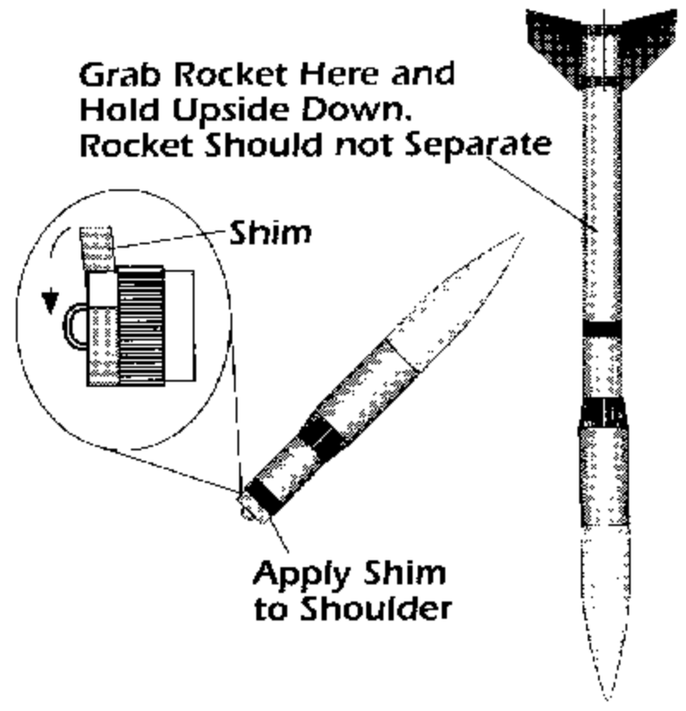
STEP 13

A. Use scissors or a sharp hobby knife to cut-out the shoulder shims provided on the self-adhesive decal sheet.

B. Wrap a shim around the shoulder of the Small Black Plastic Tube Coupler. Test fit the coupler into the Yellow Body Tube.

THE FIT BETWEEN THE PLASTIC TUBE COUPLER AND THE YELLOW BODY TUBE SHOULD BE TIGHT ENOUGH SO THAT IF YOU TURN THE ROCKET UPSIDE DOWN, THE TWO PIECES WILL NOT SEPARATE.

C. Use the second shim on top of the first if needed.



STEP 14

A. Tie a "figure 8" knot in the loose end of the White Shock Cord attached to the Yellow Body Tube.

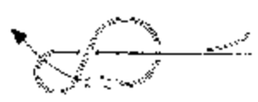
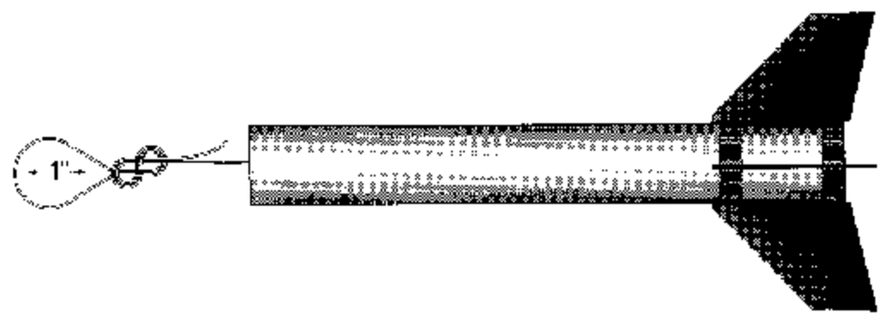


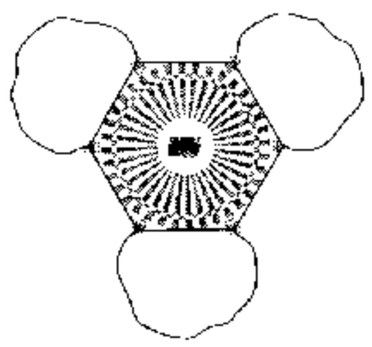
Figure 8 Knot

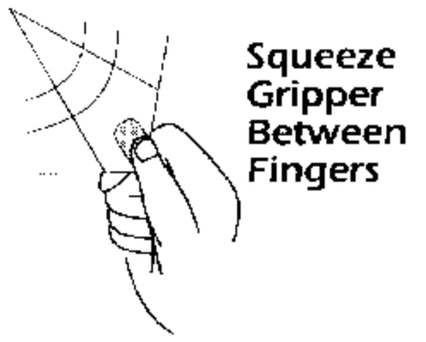


STEP 15

A. Assemble both parachutes according to the instructions printed on them.

B. Firmly squeeze each gripper tab and parachute between your fingers.

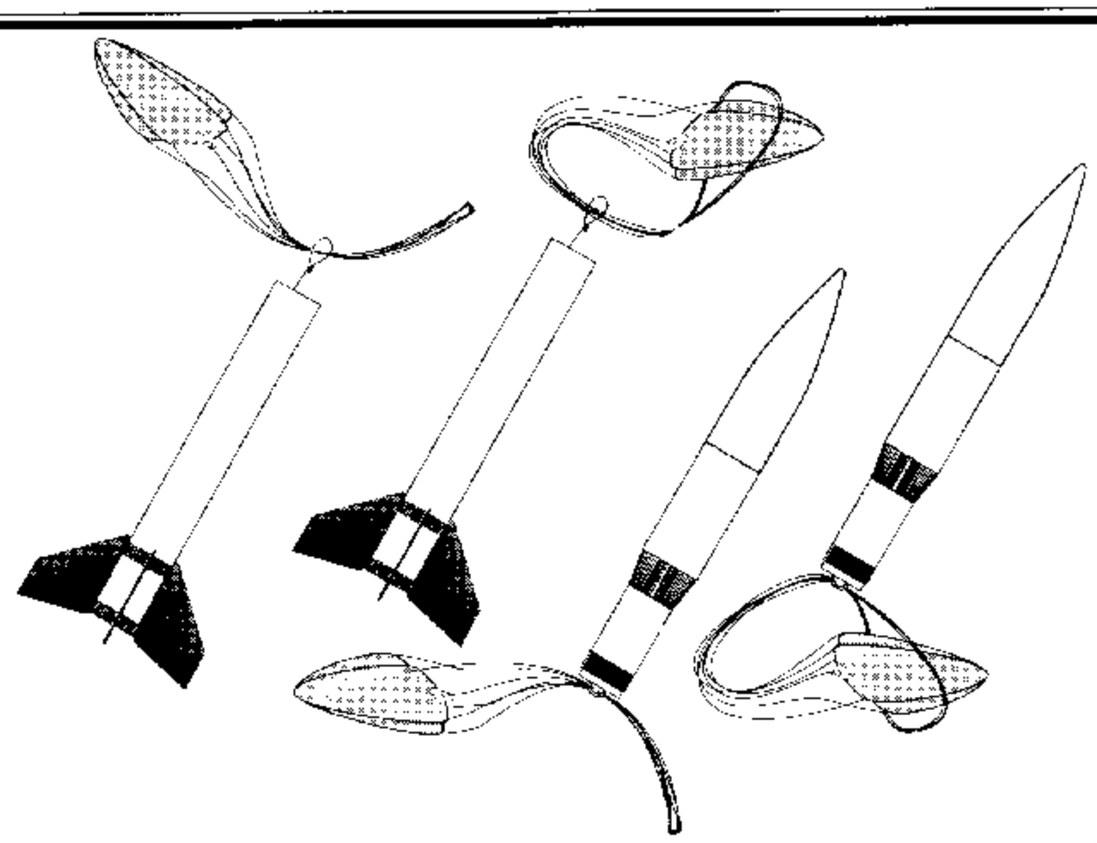




STEP 16

A. Pass the shroud line loops of one parachute through the loop you made in the White Shock Cord attached to the booster stage in step 14. Pass the parachute through the loop ends and pull lines tightly against the Kevlar.

B. Pass the shroud line loops of one parachute through the eyelet in the Black Plastic Tube Coupler. Pass the parachute through the loop ends and pull lines tightly against the eyelet.

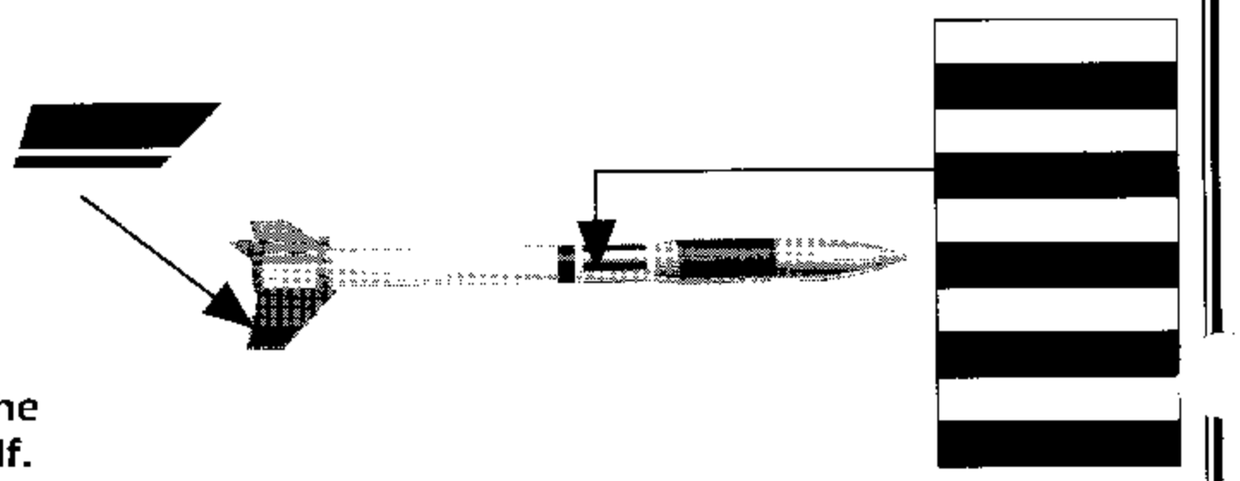


STEP 17

A. Use scissors to cut out decals.

B. Remove decal slowly from the backing to prevent decal from curling over onto itself. Once decal is removed from backing, hold decal at each end while placing it into position.

NOTE: Use caution when removing the decal from the backing to prevent decal from curling over onto itself.



READ AND FOLLOW THE ENCLOSED LAUNCHING PROCEDURES SHEET