

# BRIGHT HAWK™ ASSEMBLY INSTRUCTIONS




Product No. 1017

Skill Level One



## Things You'll Need To Assemble this Kit:

Hobby Knife 

Pencil 

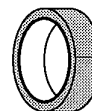
White Glue

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.



Tape

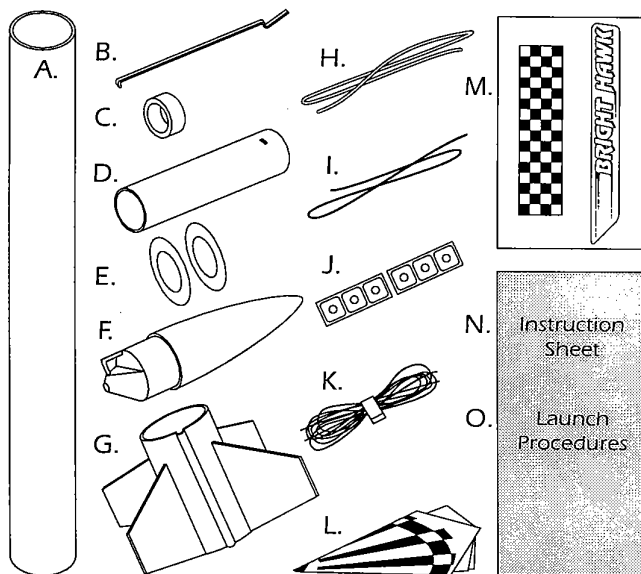
Scotch Magic Tape or Paper Masking Tape.



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

## PARTS LIST

- A. 11502 Body Tube
- B. 49000 Motor Clip
- C. 14000 Blue Thrust ring
- D. 10303S Yellow Motor Mount Tube
- E. 16002 Centering Rings (2)
- F. 20214 Plastic Nose Cone
- G. 21365 Plastic Fin Unit
- H. 50012 24 inch White Elastic Shock Cord
- I. 50052 21 inch Kevlar\* Shock Cord
- J. 50101 2 Strips of 3 GRIPPER Tabs
- K. 50100 Pack of 3-26" Shroud Lines
- L. 28107 14" Parachute
- M. 91035 Self-adhesive Decal
- N. 96027 Instruction Sheet
- O. 90960 Launch Procedures Sheet



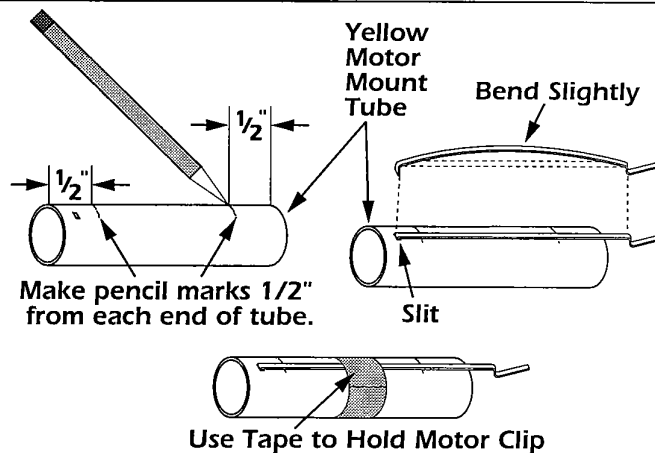
\*Kevlar is a registered trademark of Dupont

## STEP 1

**A.** Place the Yellow Motor Mount Tube up against the ruler provided above. Make two pencil marks on the tube 1/2 inch from each end as shown.

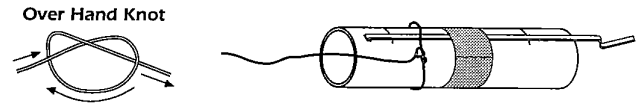
**B.** Make a slight bend in the Motor Clip as shown. Insert the Motor Clip into the slit in the Yellow Motor Mount Tube.

**C.** Wrap a piece of tape all the way around the Yellow Motor Mount Tube to hold the motor clip in place.



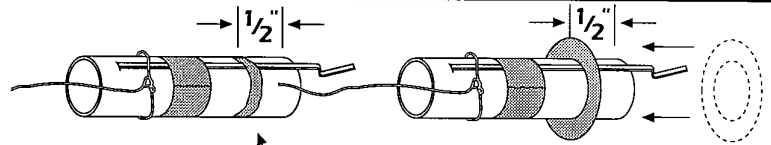
## STEP 2

A. Use two overhand knots to tie the Yellow Kevlar shock cord around the yellow Motor Mount Tube as shown.

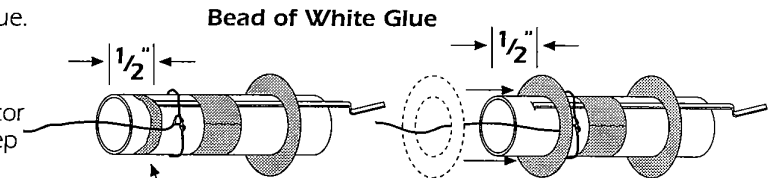


## STEP 3

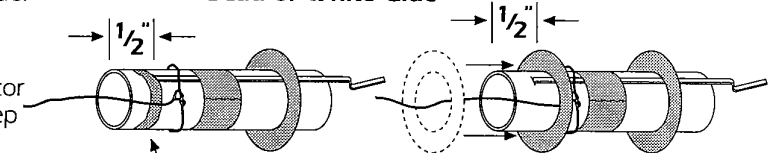
A. Apply a bead of white glue around the Yellow Motor Mount Tube on the pencil mark (made in step 1A.) 1/2 inch from rear end as shown.



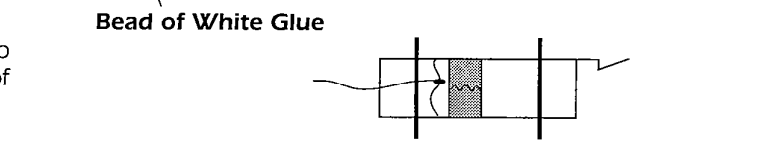
B. Slide one of the paper centering rings onto the Yellow Motor Mount Tube and into the bead of glue. Check to be sure ring is aligned straight on Yellow tube as shown.



C. Apply a bead of white glue around the Yellow Motor Mount Tube on the other pencil mark (made in step 1A.) 1/2 inch from the forward end as shown.



D. Pass the Yellow Kevlar shock cord through the remaining paper centering ring. Slide the ring onto the Yellow Motor Mount Tube and into the bead of glue. Check to be sure ring is aligned straight on Yellow tube as shown.

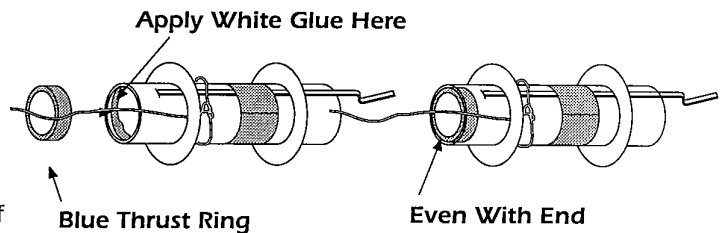


## STEP 4

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

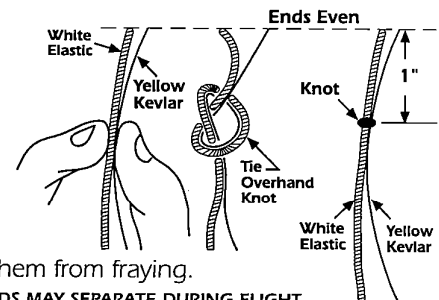
B. Insert the Blue thrust ring into the Yellow Motor Mount Tube so it is even with the end of the Yellow Motor Mount Tube.

C. After the glue has set completely, apply a small bead of white glue to both sides of each centering ring. Smooth out the glue with your finger. Wipe excess glue off your finger onto a tissue or paper towel.



## STEP 5

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. While holding the two cords together, tie a single parallel overhand knot approximately one inch in from the even ends as shown.



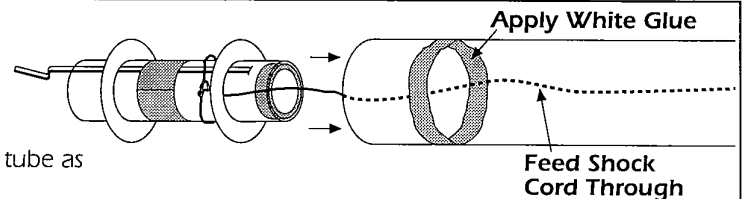
B. Gently pull on both cords to set the knot and prevent it from slipping.

C. 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.

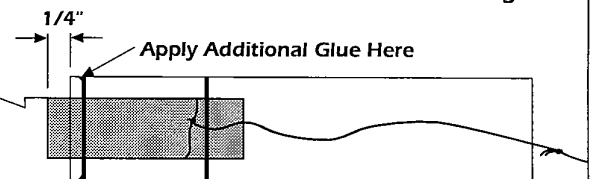
## STEP 6

A. "Feed" the shock cord attached to the motor mount assembly into the White body tube until the cord comes out the other end of the white tube.



B. Apply white glue around the inside of the White body tube as shown.

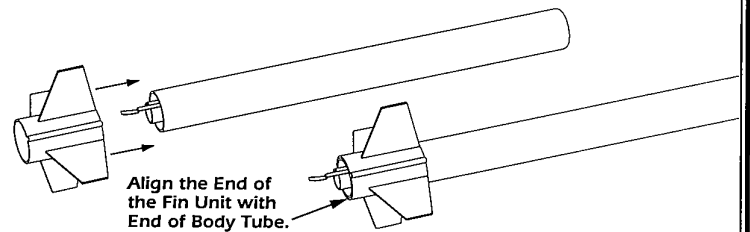
C. Immediately insert the motor mount assembly into the White body tube and PUSH INTO THE BODY TUBE WITH ONE FAST & SMOOTH MOTION until the Yellow motor mount tube extends out from the end of the white body tube 1/4 inch as shown.



D. Apply additional white glue to the exposed centering ring/body tube joint as shown. Wipe away excess glue with your finger.

## STEP 7

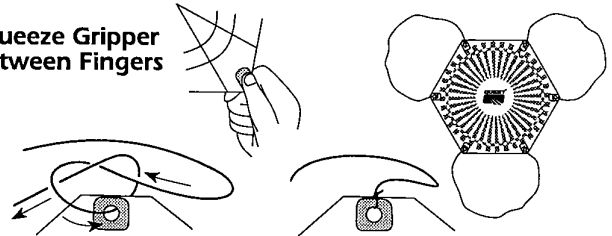
A. Slide the One-Piece Molded Plastic Fin Unit onto the body tube as shown.



## STEP 8

- A. Apply gripper tabs to parachute so holes in gripper tabs line up with holes in parachute. Firmly squeeze each gripper tab and parachute between your fingers.
- B. Assemble the parachute by passing the end of a shroud line through a hole in a gripper tab and tying 2 overhand knots. Tie each of the 6 ends of shroud line to the parachute through the gripper tab holes.
- C. Assembled parachute should appear as shown.

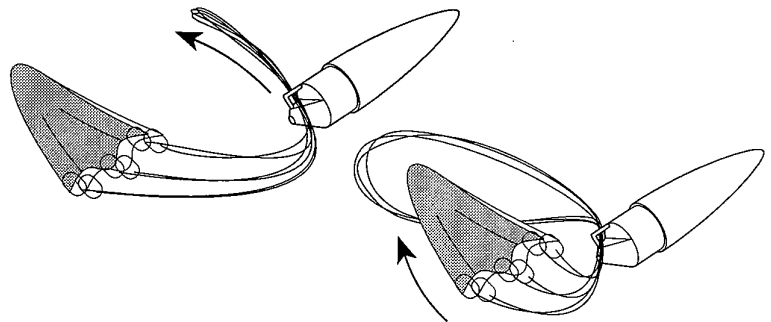
Squeeze Gripper Between Fingers



Tie 2 Over Hand Knots Through Each Gripper

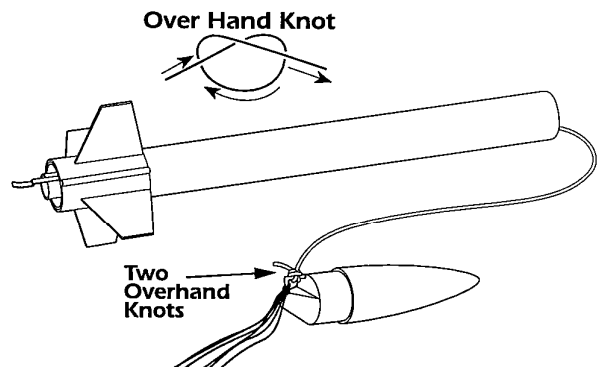
## STEP 9

- A. Pass the shroud line loops through the eyelet on the nose cone.
- B. Pass parachute through loop ends and pull lines tightly against the eyelet.



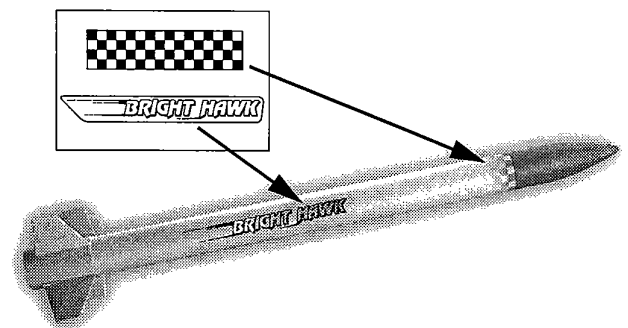
## STEP 10

- A. Use two overhand knots to tie the loose end of the shock cord onto the eyelet of the nose cone.
- B. If the nose cone fits too loose, wrap a short piece of tape around the shoulder of the nose cone until you get a snug but not tight fit.



## STEP 11

A. Remove decal slowly from the backing to prevent decal from curling over onto itself and position on model using package photo for proper positioning.



# FLYING YOUR BRIGHT HAWK ROCKET

## WHAT ELSE YOU WILL NEED:

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

- QUEST Lift-Off Launch Pad (No. 7610)
- QUEST Futuristic Launch Controller (No. 7510)
- QUEST Parachute Recovery Wadding (No. 7021)
- QUEST Rocket Motors, Type B6-4, C6-3 or C6-5
- Use a B6-4 Motor for your first flights.

## ESTIMATED ALTITUDES

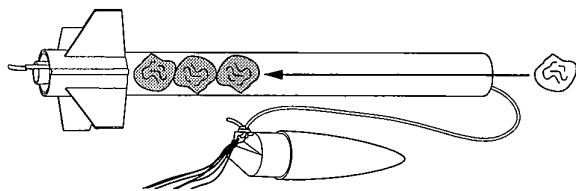
The following is a guide to assist you in determining which motor to use based on the wind conditions and size of flying field available.

MOTOR	ESTIMATED ALTITUDE
B6-4	400 FEET
C6-3	650 FEET
C6-5	800 FEET

## PREPPING YOUR ROCKET FOR FLIGHT

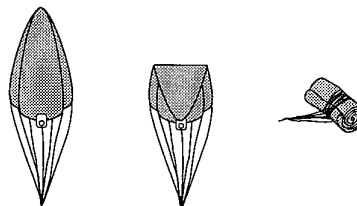
### STEP 1

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

- 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.
- Gather the triangles together into one flat triangle.
- Fold the top of the parachute down over itself once.
- Now continue to roll the parachute over itself and roll the shroud lines around it.



### STEP 3

- 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.**
- 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 PROCEDURE SHEET**

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



Manufactured by:  
QUEST AEROSPACE, INC.  
6012 E. Hidden Valley Dr.  
Cave Creek, AZ 85331-8555