# COURIER™ SSEMBLY INSTRUCTIONS



Product. No. Q2011

Skill Level Two



**Plastic Cement** 

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

White

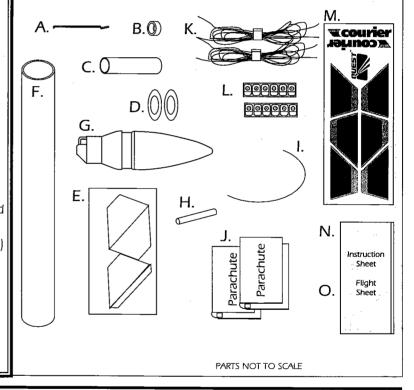
Tape

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.** 16002 Flat Kraft Centering Rings (2)
- E. 33002 Die cut Balsa Fin Set
- F. 11501 15 Inch White Body Tube
- **G.** 20046 Nose Cone
- H. 10001 2 inch Launch Lug
- I. 50052 21 inch Yellow Kevlar Shock Cord
- J. 28106 14 Inch Parachute (2)
- K. 50100 Pack of 3-26 Inch Shroud Lines(2)
- L. R306-2 Strip of 6 Gripper Tabs(2)
- M. 91505 Self-Adhesive Decal
- N. 96005 Instruction Sheet
- O. 96105 Launch Procedures Sheet

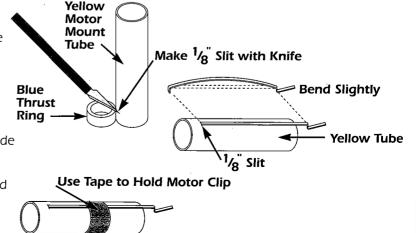


#### STEP

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 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.

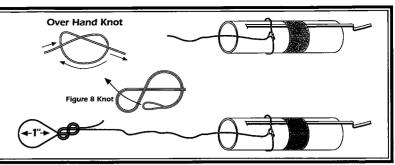
C. Wrap a piece of tape all the way around the Yellow Motor Mount Tube to hold the motor clip in place.



<sup>\*</sup> Kevlar is a registered trademark of Dupont

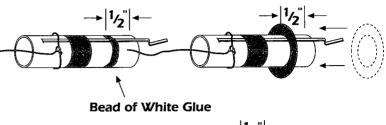
#### STEP 2

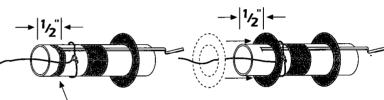
- A. Use two overhand knots to tie the Yellow Kevlar shock cord around the yellow Motor Mount Tube as shown.
- **B.** Tie a figure "8" knot in the loose end of the Yellow Kevlar with a 1 inch loop as shown.



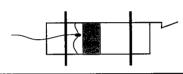
#### STEP 3

- A. Apply a bead of white glue around the Yellow Motor Mount Tube 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 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.



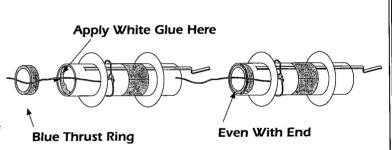






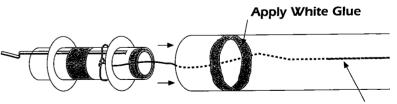
#### STEP 4

- **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.

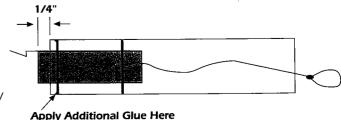


## STEP 5

- **A.** "Feed" the Yellow Kevlar 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.

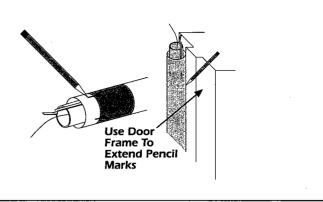


Feed Shock Cord Through



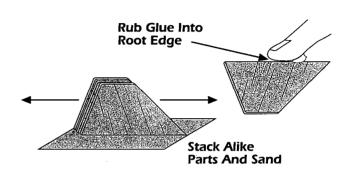
#### STEP 6

- **A**. Cut out the tube marking guide form the front page of the instruction sheet.
- **B.** Wrap the tube marking guide around the body tube. Align the arrow that is marked "Launch Lug" with the motor clip. Mark the body tube at each of the arrows with a pencil.
- **B**. Use a door frame as a guide and extend each of the pencil marks 6 inches up from the rear of the body tube.



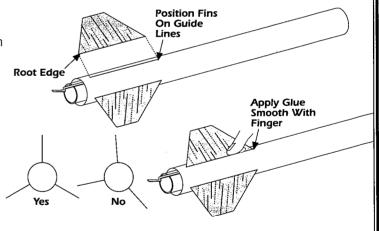
#### STEP 7

- **A.** Carefully remove each of the three die-cut balsa fins from the sheet with a sharp hobby knife.
- **B.** Stack the fins together and sand all edges smooth:
- **C.** Rub a small line of white glue into the root edge of each fin and set aside to dry.



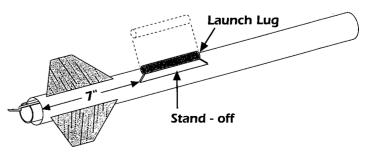
#### STEP 8

- A. Apply a small line of white glue along the root edge of a fin and position it along one of the fin lines 1/2 inch from end of the body tube. Adjust the fin so that it projects straight away form the body tube as shown. Allow the glue to set for a few minutes before attempting to glue on the remaining fine. Repeat this step for the remaining two fins.
- **B.** After the glue is completely dry apply a small bead of white glue to both sides of a fin-body tube joint. Smooth out the glue with your finger. Wipe excess glue off your finger onto a tissue or paper towel.
- **C.** Repeat the above step for the remaining fin-body tube joints. Set aside to dry.



#### STEP 9

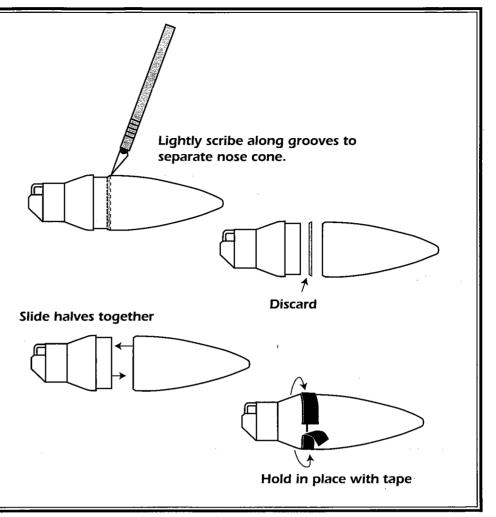
- **A.** Make a pencil mark on the launch lug line 7 inches form the rear of the rocket as shown.
- **B.** Apply white glue to the root edge of the launch lug stand-off and place it along the pencil line with one end even with the mark 7 inches from the rear of the rocket as shown.
- **C.** Apply white glue to the launch lug and place it along the outer edge of the stand-off as shown.



**NOTE:** Be sure launch lug/stand-off are lined up straight along the white body tube.

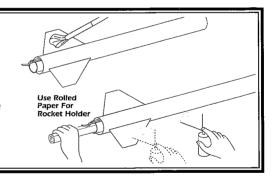
#### STEP 10

- **A.** Use a sharp hobby knife to make several light scribes/cuts along the molded grooves to separate the nose cone as shown.
- **B.** Use sandpaper to remove rough edges on both parts.
- **C.** Slide the two halves of the nose cone together. Hold in place by wrapping tape all the way around the cone. Black vinyl electrical tape works best.



## STEP 11

- **A**. After all the glue is completely dry apply a coat of sanding sealer to each fin. When sealer is dry, lightly sand each fin.
- **B**. Repeat the sealing and sanding process until the surface of each fin is smooth
- **C**. Paint the entire rocket body and fins with gloss white spray enamel. Follow instructions on the spray can for best results.



## STEP 12

**A.** When all paint is dry, apply the self-adhesive decals as shown here. **NOTE:** Use caution when removing the decal from the backing to prevent decal from curling over onto itself.



## STEP 13

- **A.** Assemble both parachutes according to the instructions printed on them.
- **B.** Firmly squeeze each gripper tab and parachute between your fingers.

