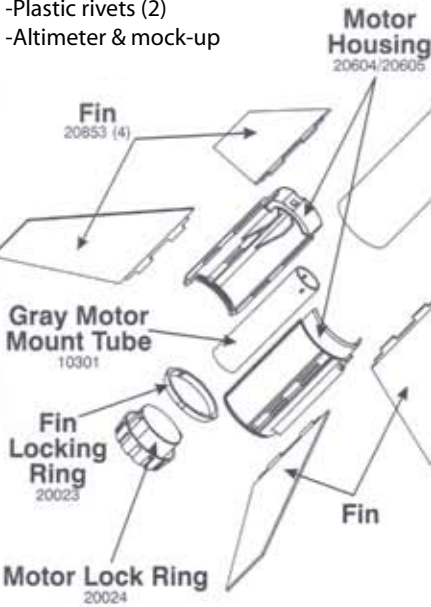


## ASSEMBLY INSTRUCTIONS

### TOOLS YOU'LL NEED TO ASSEMBLE THIS ROCKET

Tube Type Plastic Cement

- White glue
- 1" wide Mylar strip (2)
- Adhesive label w/ team & section numbers (2)
- Plastic rivets (2)
- Altimeter & mock-up



Yellow Body Tube 11418

Large Blow Mold Reducer 20215

- Belt sander
- Drill press
- Scissors
- Conductive foam/cutting tool

26" Shroud Lines 50100 (2)

Gripper Tabs 50101 (2)

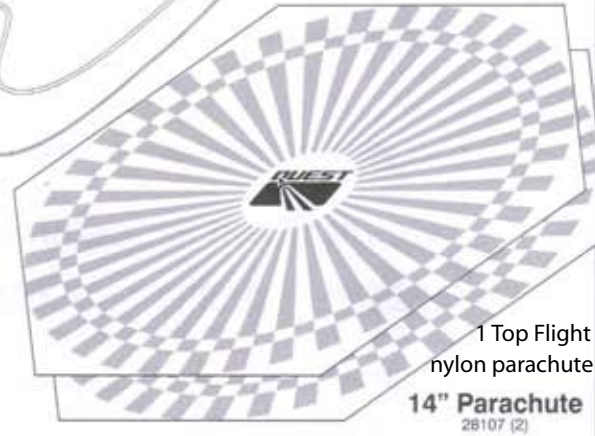
Decal Sheet 3-01604-1030

Nose Cone 20209

Black Payload Tube 11506

White Shock Cord 50012

Yellow Shock Cord 50052



PARTS NOT TO SCALE

1

- White Elastic Shock Cord
- Yellow Kevlar Shock Cord
- Hold the Yellow and White Cords side by side with the ends even.
  - Tie an over-hand knot to join the cords.

Tie so that the tail of finished knot is no longer than 1". Do not cut the cords to this length

C. Pass Yellow Cord through loop in Motor Housing.

D. Tie a double knot.

2

- Note where parts touch. Don't glue in fin section.
- Position slot in Gray Motor Mount Tube over tab on Motor Housing.
  - Glue the two Motor Housing halves together.
  - Feed Yellow and White Cord through the Yellow Body Tube

D. Apply glue around inside of Body Tube and insert Motor Housing until it seats against the Body Tube.

**3**

A. Test fit all four Fins into the slots. Be generous with cement.

B. Remove each fin one at a time, glue, and replace.

C. Twist Fin Locking Ring onto rear of Motor Housing.

D. Tie a figure "8" knot in the loose end of the White Shock Cord with a 1" loop as shown. Make sure the loose end of the string is less than 1". Retie, do not cut.

Check Fin alignment

**4**

A. Using belt sander, remove molded ends of plastic nosecone and reducer in order to enlarge payload compartment.

**5**

Use cutting tools or the nose cone to make 8 large, 4 small, and 2 ring-shaped foam disks from the supplied foam.

Reducer: Insert 4 small disks, then 2 large disks.

Nose Cone: Insert 6 large disks, then 1 foam ring.

Remaining ring will be placed around altimeter to keep centered. Test payload bay with metal mock-up, NOT with an altimeter; it should take a small amount of compression to close the payload bay, and the payload should not move around at all when the payload section is jiggled. The number of disks is just a starting point. You may need to add additional disks.

**6**

A. Join Black Payload Tube and Large Blow Mold Reducer together, but DO NOT GLUE.

B. Drill holes for plastic rivets. Holes should be opposite each other,  $.250 \pm .010$  from end of black tube (X), and  $5/32"$  ( $.156 + .004 / -.000$ ) in diameter.

C. Drill holes for static vent  $.500 \pm .010$  from end of black tube (X). Holes should be spaced at  $120^\circ$ , with the first one  $90^\circ$  from each of the rivet holes. Calculate hole diameter from attached document from Adept Rocketry. Do NOT use the document to calculate hole position.

Note: Drill directly through both tube and reducer.

**7**

A. Glue Nose Cone in end of Payload Tube.

B. Taking care to line up vent holes, use removable plastic rivets to attach Black Payload Tube and Large Blow Mold Reducer.

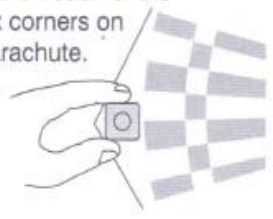
**8**

Do NOT modify the Top Flight nylon parachute. The parachutes that came with the kit must be modified to allow the rocket body to fall faster. Cut a 1.8" dia. hole in the center of the rocket body parachute. As in the figure above, pinch the center of the parachute and cut a radius length (0.90") from the point.

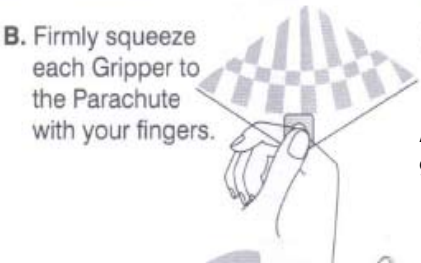
# 9

Repeat A-C for second Parachute

A. Place one Gripper Tab on each of the six corners on Parachute.

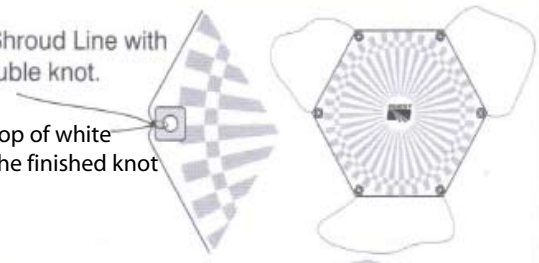


B. Firmly squeeze each Gripper to the Parachute with your fingers.

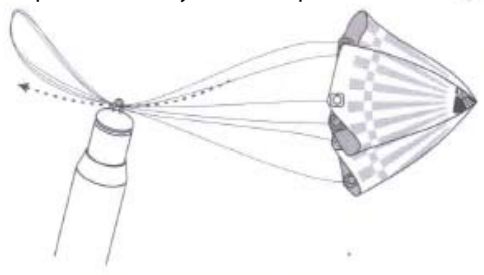


C. Tie Shroud Line with a double knot.

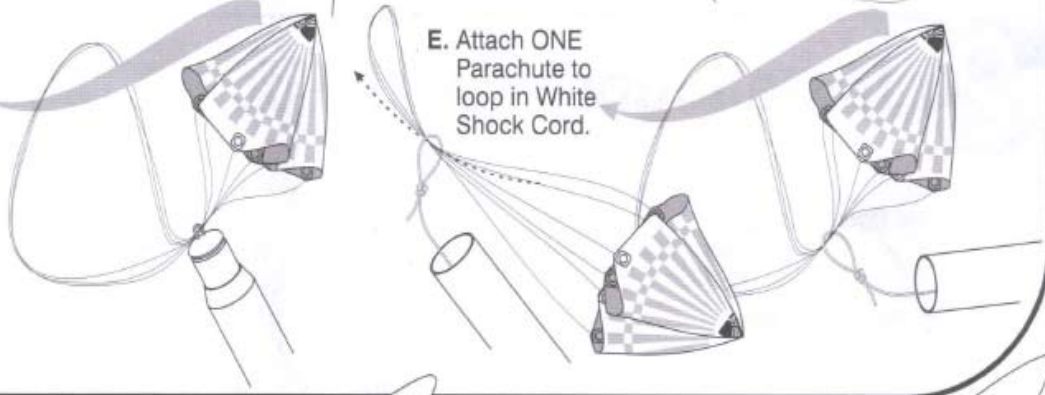
Add a drop of white glue to the finished knot



D. Attach the Top Flight nylon parachute to eyelet in Coupler base

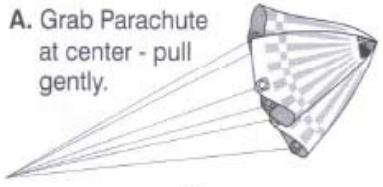


E. Attach ONE Parachute to loop in White Shock Cord.

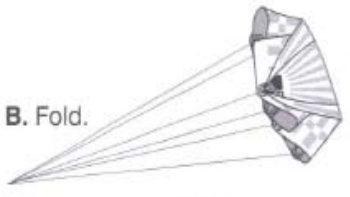


# 10

A. Grab Parachute at center - pull gently.



B. Fold.

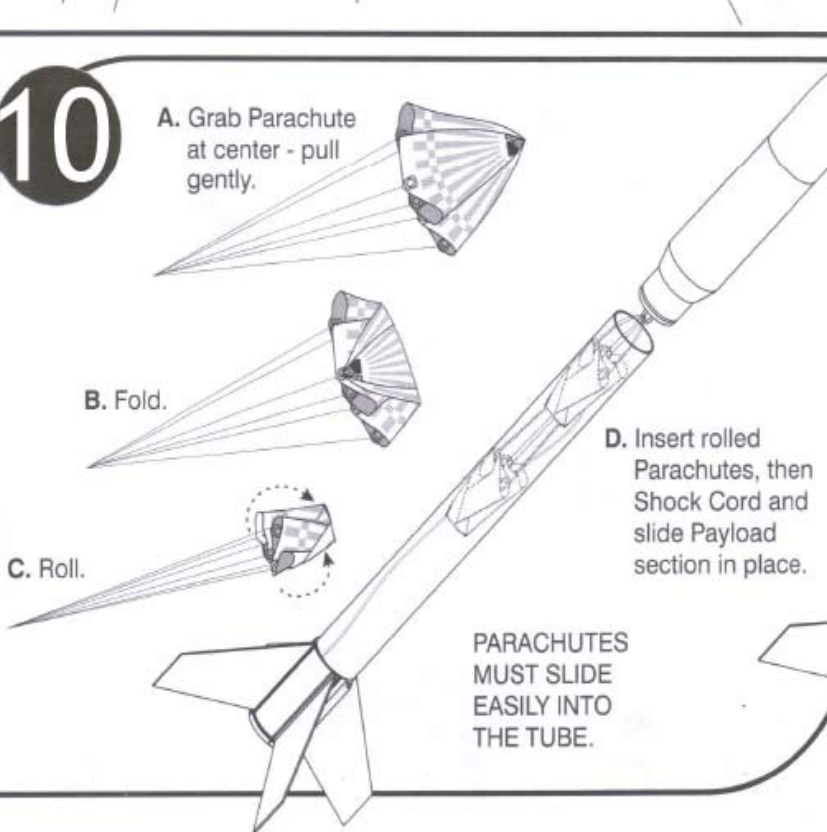


C. Roll.



D. Insert rolled Parachutes, then Shock Cord and slide Payload section in place.

PARACHUTES MUST SLIDE EASILY INTO THE TUBE.



# 11

A. Attach kit decals, if desired.

B. Apply one label with your Section and Team number to the Yellow Body Tube, and the other label to the payload section.

C. Attach two 1" thick strips of mylar around the nose cone and body.

