ASSEMBLY TIP
Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don’t fit properly, sand as required for precision assembly.

PARTS AND SUPPLIES
Locate the parts shown below and lay them out on the table in front of you. In addition to the parts included in the kit you will also need:

- Scissors
- Pencil
- Ruler
- Sandpaper
- Modeling knife
- White glue
- Plastic cement
- Masking tape
- Nose cone
- Paper adapters
- Engine mount tube
- Engine hook
- Shock cord
- Parachute
- Tape discs
- Shroud line
- Body tube (White)
- Decal
- Fin unit
1
A. Mark engine mount tube 1 inch and 2½ inches from one end.
B. Cut 1/8 inch long slit at 2½ inch mark.
C. Insert one end of engine hook into slit.
D. Wrap masking tape around assembly twice at 1 inch mark.
E. Slide slotted adapter ring onto rear of tube and up to masking tape. Slot fits over engine hook. Glue both sides of ring/tube joint.
F. Slide remaining ring over front of tube and down to end of engine hook. Glue both sides of ring/tube joint.

2
A. Cut shock cord mount from top of page 1.
B. Crease on dotted lines by folding. Spread glue on section 1 and lay end of shock cord into glue. Fold over and apply glue to back of first section and exposed part of section 2. Lay shock cord as shown and fold mount over again.
C. Clamp unit together with fingers until glue sets.

3
A. Apply glue to inside of white body tube to cover an area no less than 1 inch to 2 inches from end. The glued area should be same size as shock cord mount.
B. Press mount firmly into glue as shown.
C. Hold until glue sets. Set body aside.

4
A. Cut out parachute on edge lines.
B. Cut three 23 inch lengths of shroud line.
C. Form small loops with shroud line ends and press onto sticky side of tape discs.
D. Attach tape discs with line ends to top of parachute as shown.
E. Firmly press tape discs into place until both tape discs and parachute material are molded around shroud line loops. Set parachute aside.

5
A. Check for and remove any burrs on the forward inside edge of fin unit. Test fit on body tube by inserting the tube from rear of unit.
B. Mark body tube 1 inch and 3 inches from the end without the shock cord.
C. Smear "tube-type" plastic cement over entire area between two lines.
6
A. Place shock cord inside body tube.
B. Insert same end of body tube into rear of fin unit.
C. Slide unit down tube with a twisting motion until end of fin unit is even with end of body tube.

7
A. Smear white glue inside rear of body tube about 1 1/4 inches from the end.
B. Slide engine tube assembly into this end of tube so engine tube is even with end of body tube.
C. Be sure engine hook is aligned with launch lug as shown.

8
A. Test fit nose cone into front end of body tube.
B. Scrape ribs on nose cone shoulder until smooth fit is achieved. Not too loose or too tight.
C. Clear plastic from parachute attachment loop with modeling knife.

9
A. Pass shroud line loops through loop on nose cone. Pass parachute through loop ends and pull lines against the nose cone.
B. Tie free end of shock cord to nose cone loop.

FINISHING YOUR ROCKET
When all glue is completely dry, cut out and apply pressure sensitive decals. Refer to photograph on front page and/or front of box for decal placement.
ROCKET PREFLIGHT

CRUMPLE AND INSERT 4 SQUARES OF RECOVERY WADDING

SPIKE FOLD ROLL

FOLD PARACHUTE

WRAP LINES LOOSELY AROUND 'CHUTE

INSERT PARACHUTE IN ROCKET INSTALL NOSE CONE IN PLACE

PREPARE ENGINE

SEPARATE THE IGNITERS

IGNITER TIP MUST TOUCH PROPELLANT DEEP INSIDE NOZZLE OPENING

ENGINE

APPLY AND FIRMLY PRESS TAPE DISC OR MASKING TAPE IN PLACE

HOOK MUST LATCH OVER END OF ENGINE

LAUNCH SUPPLIES
To launch your rocket you will need the following items:
—An Estes model rocket launching system
—Estes Recovery Wadding (No. 2274)
—ENGINES: B6-4, B8-5, or C6-5
Use a B6-4 engine for your first flight to become familiar with your rocket's flight pattern. Use only with Estes Products.

FLYING YOUR ROCKET
Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 250 feet square. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great.

COUNTDOWN AND LAUNCH

LAUNCH ROD

LAUNCH LUG

MASKING TAPE STAND-OFF

BLAST DEFLECTOR

10. REMOVE SAFETY KEY to disarm the launch controller.
9. Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
8. Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.
7. Move back from your rocket as far as launch wire will permit, (at least 15 feet).
6. INSERT SAFETY KEY to arm the launch controller.
5. Give audible Countdown 5...4...3...2...1
4. LAUNCH!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES
3. Remove safety key—Replace cap on rod.
2.
1.

FOR YOUR SAFETY AND ENJOYMENT
Always follow the NAR-HI® MODEL ROCKETRY SAFETY CODE while participating in any model rocketry activities.

*National Association of Rocketry-The Hobby Industry of America

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