



# ATHENA™

## FLYING MODEL ROCKET

**SKILL LEVEL 1**

Recommended for the Beginning Modeler.

- AS BEAUTIFUL AS THE GREEK GODDESS OF WISDOM FOR WHICH IT'S NAMED.
- Chrome Plated Plastic Nose Cone
- Colorful Adhesive Foil Decal
- White Body & Plastic Fin Unit
- 12 Inch Parachute
- Quick Release Engine Mount

Length: 15 in. (38.1 cm)  
Dia: 0.976 in. (24.8 mm)  
Weight: 1.27 oz. (36 g)

Recommended Engines:  
1/2A6-2, A8-3 (First Flight), A8-5,  
B4-4, B4-6, B6-4, B6-6, B8-5,  
C6-5, or C6-7

**LAUNCH  
TO 1200  
FEET!**



This is a model kit requiring assembly. Glue and finishing supplies, launch system and engine for flight are not included.

#2026



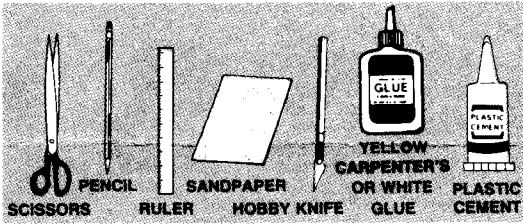
## ASSEMBLY TIP

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:



## ROCKET ASSEMBLY

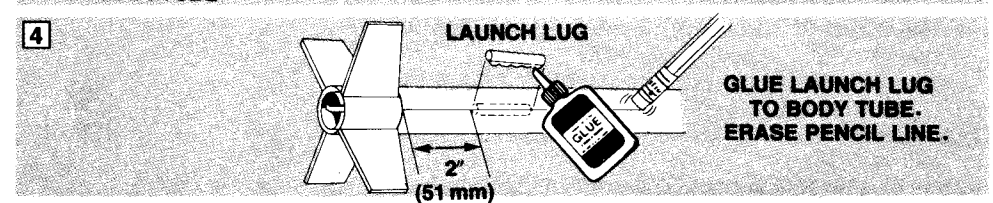
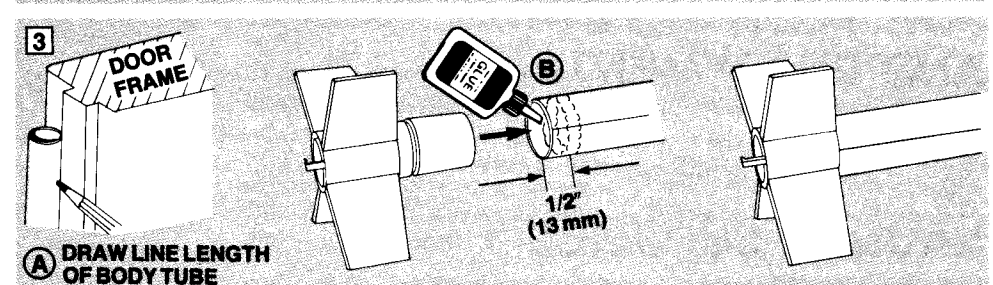
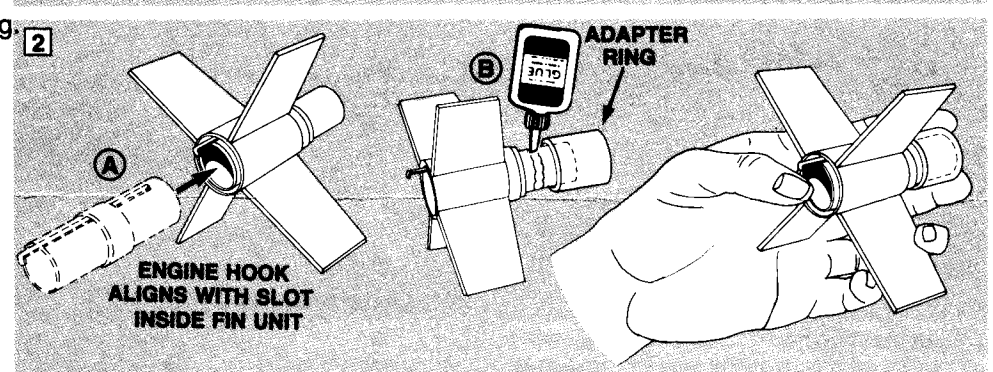
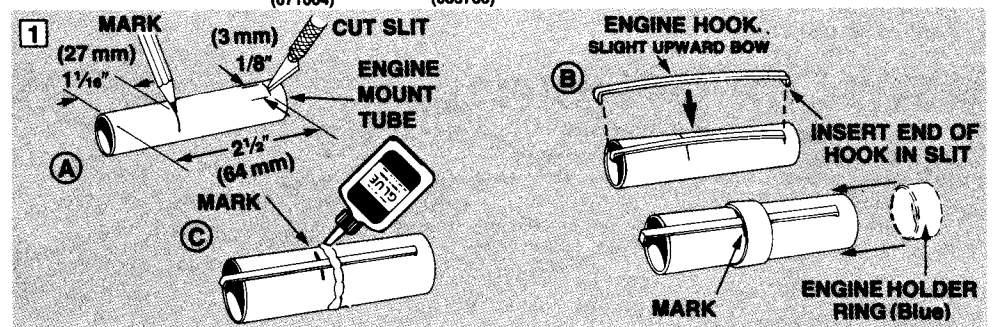
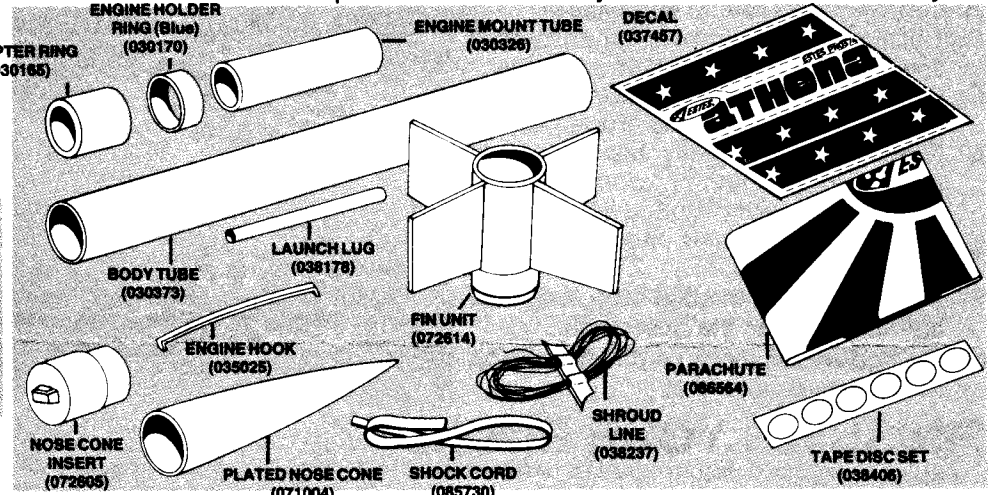
**1.**  
 A. Mark engine mount tube at  $1\frac{1}{16}$ " (27 mm) and at  $2\frac{1}{2}$ " (64 mm) from one end as shown. Cut a  $\frac{1}{8}$ " (3 mm) long slit at  $2\frac{1}{2}$ " (64 mm) mark.

B. Insert one end of engine hook into slit.  
 C. Apply glue around engine mount tube about  $\frac{1}{8}$ " (3 mm) ahead of mark as shown. Now slide engine holder ring on engine mount tube to the  $1\frac{1}{16}$ " (27 mm) mark. Do not stop while sliding ring into place or the glue may grab at wrong point. Let assembly dry before proceeding.

**2.**  
 A. Slide assembly from Step 1 fully into plastic fin unit from rear. The engine hook on engine mount tube will fit into slot in fin unit.  
 B. Apply glue around engine tube just ahead of fin unit as shown. Next, in one continuous movement, slide adapter ring onto engine mount all the way down to fin unit. Hold engine mount tube in place with thumb while sliding adapter ring into place.

**3.**  
 A. Lightly draw a straight line along entire length of the body tube as shown.  
 B. Apply glue to inside of one end of body tube about  $\frac{1}{2}$ " (13 mm) from end. Align the line on body tube with the engine hook. In one continuous motion, push the body tube over adapter ring and all the way down to the fins as shown.

**4.**  
 Glue launch lug to body tube  $2$ " (51 mm) from front of fin unit. Sight along tube to be sure launch lug is straight with body. After glue is dry, erase pencil line still showing on tube.

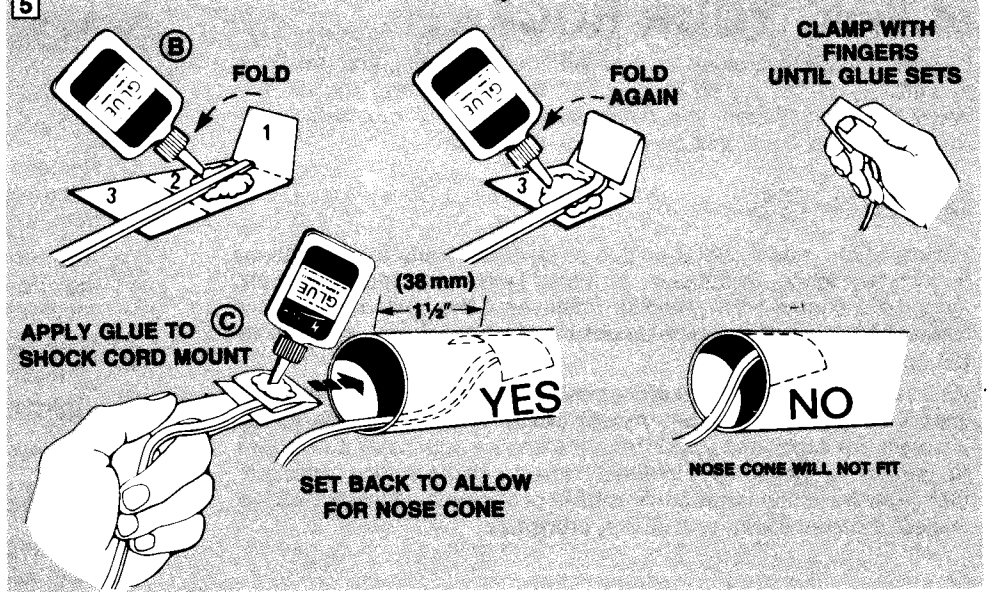




5.

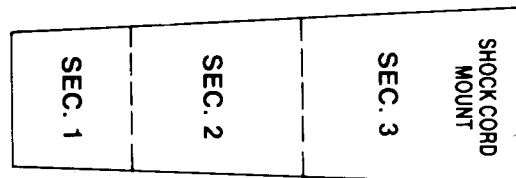
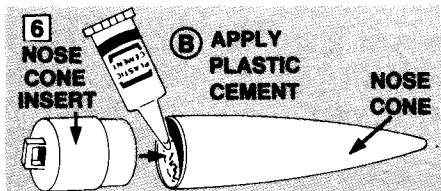
- A. Cut shock cord mount from top of page 2.
- B. Crease on dotted lines by folding. Spread glue on section 2 and lay end of shock cord into glue at a slight diagonal as shown. Fold section 1 forward. Apply glue to section 3. Fold forward again. Clamp firmly with your fingers until glue sets.
- C. Apply glue to the shock cord mount. With the shock cord mount positioned on the end of your finger or a pencil, gently position the mount into the front of body tube far enough from the front edge of the tube to allow the nose cone to fit into place ( $1\frac{1}{2}'' - 38\text{ mm}$ ). Press shock cord mount into position. Smear a film of glue over the mount and surrounding area in the body tube to insure a good bond and a smooth surface.

page 1



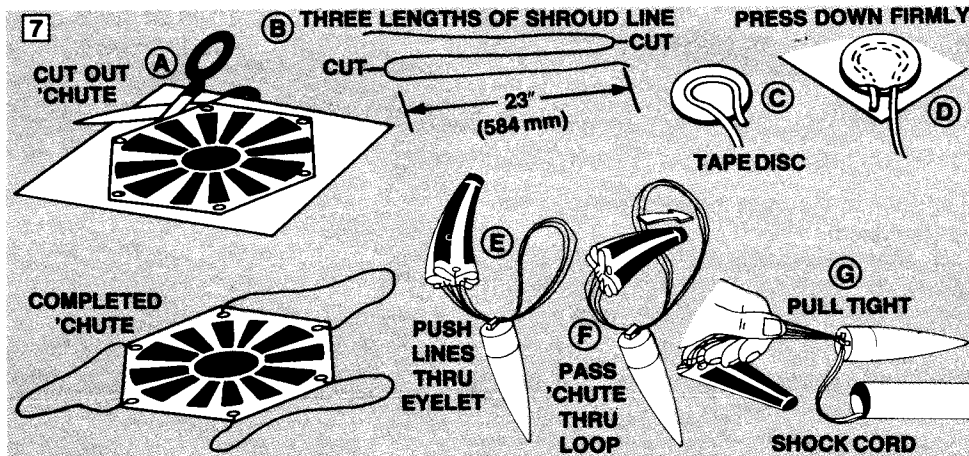
6.

- A. Run a knife blade around the inside of the nose cone to remove any chrome material that might be inside.
- B. Apply plastic cement to inside edge of nose cone, and push nose cone insert into place.



7.

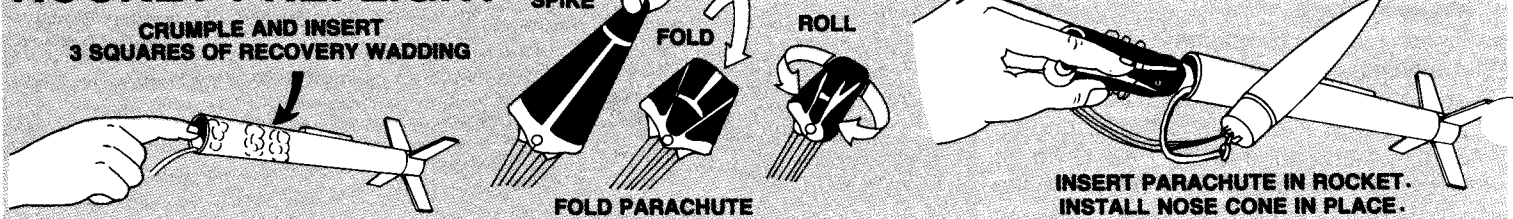
- A. Cut out parachute on edge lines.
- B. Cut three 23" (584 mm) lengths of shroud line.
- C. Form small loop with shroud line ends and press onto sticky side of tape discs.
- D. Press tape discs firmly into place until both tape discs and parachute material are molded around shroud line loops.
- E. Pass shroud line loops through eyelet on nose cone.
- F. Pass parachute through loop ends and pull lines against the nose cone.
- G. Tie free end of shock cord to nose cone eyelet with double knot.



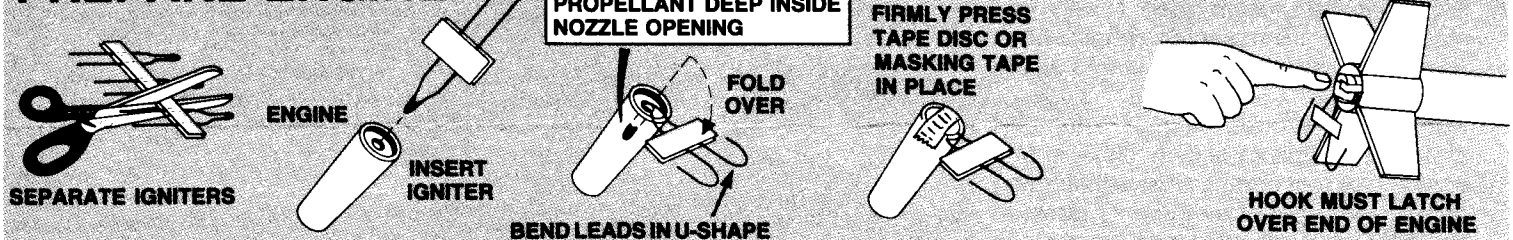
## FINISHING YOUR ROCKET

Application of the pressure sensitive decals included with this kit is all that is needed for finishing. Painting is not required. Cut out each decal inside the dotted black line. Refer to color panel for decal placement. Peel decal off backing sheet. Carefully align and press decal gently into place.

## ROCKET PREFLIGHT



## PREPARE ENGINE



## FOR YOUR SAFETY AND ENJOYMENT

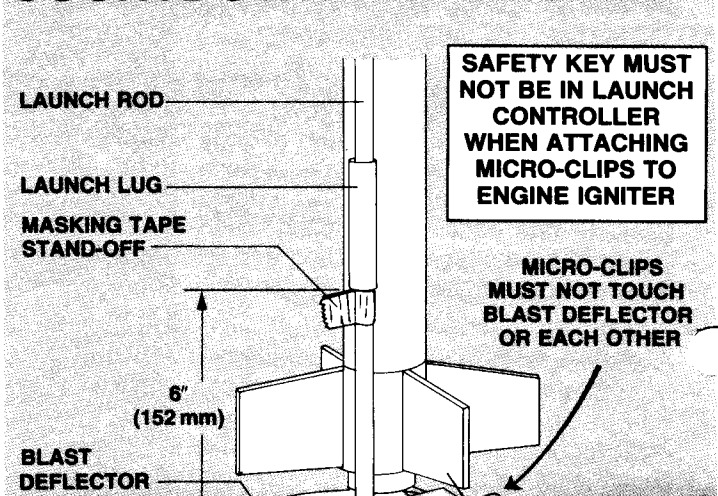
Always follow the NAR\* MODEL ROCKETRY SAFETY CODE while participating in any model rocketry activities.

\*National Association of Rocketry

## LAUNCH SUPPLIES

- To launch your rocket you will need the following items:
- Estes Model Rocket Launch System and Launch Pad
  - Estes Recovery Wadding No. 2274
  - Recommended Estes Engines: 1/2A6-2, A8-3 (First Flight), A8-5, B4-4, B4-6, B6-4, B6-6, B8-5, C6-5, or C6-7.
- To become familiar with your rocket's flight pattern, use an A8-3 engine for your first flight.
- Use only with Estes products.**

## COUNTDOWN AND LAUNCH



# FLYING YOUR ROCKET

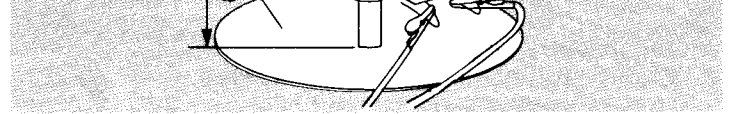
Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 250 feet (76 meters) square. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great.

## MISFIRES

Failure of the model rocket engine to ignite is nearly always caused by incorrect igniter installation. An Estes igniter will function properly even if the coated tip is chipped. However, if the coated tip is not in direct contact with the engine propellant, it will only heat and not ignite the engine.

When an ignition failure occurs, remove the safety key from the launch control system and wait one minute before approaching the rocket. Remove the expended igniter from the engine and install a new one. Be certain the coated tip is in direct contact with the engine propellant, then tape the igniter leads firmly to base of engine as illustrated above. Repeat the countdown and launch procedure.

page 2



- ⑩ BE CERTAIN SAFETY KEY IS NOT IN 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 - 5 meters).
- ⑥ INSERT SAFETY KEY to arm the launch controller.  
Give audible countdown 5...4...3...2...1

**LAUNCH!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES.**

**REMOVE SAFETY KEY FROM LAUNCH CONTROLLER.  
REPLACE SAFETY KEY AND SAFETY CAP ON LAUNCH ROD.**

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