





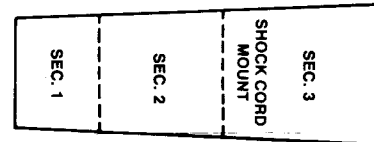
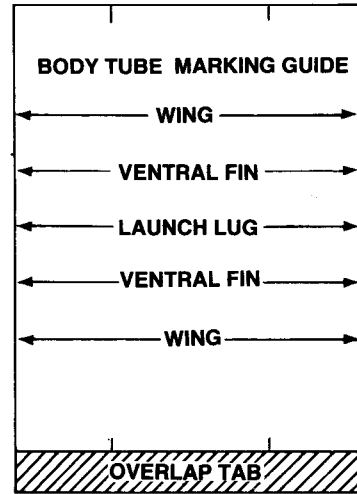
A DAMON COMPANY

ESTES INDUSTRIES  
1295 H STREET  
PENROSE, COLORADO 81240 USA



FLYING MODEL ROCKET

#1941

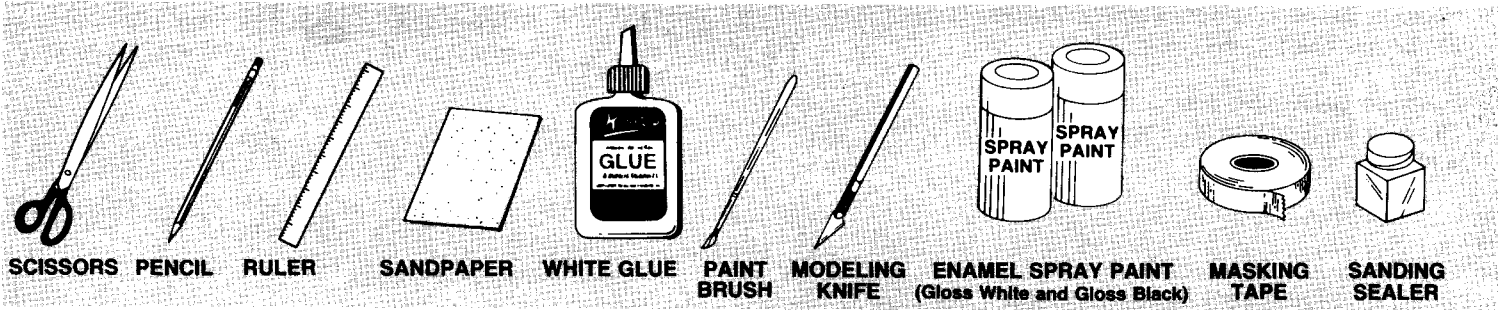


### ASSEMBLY TIP

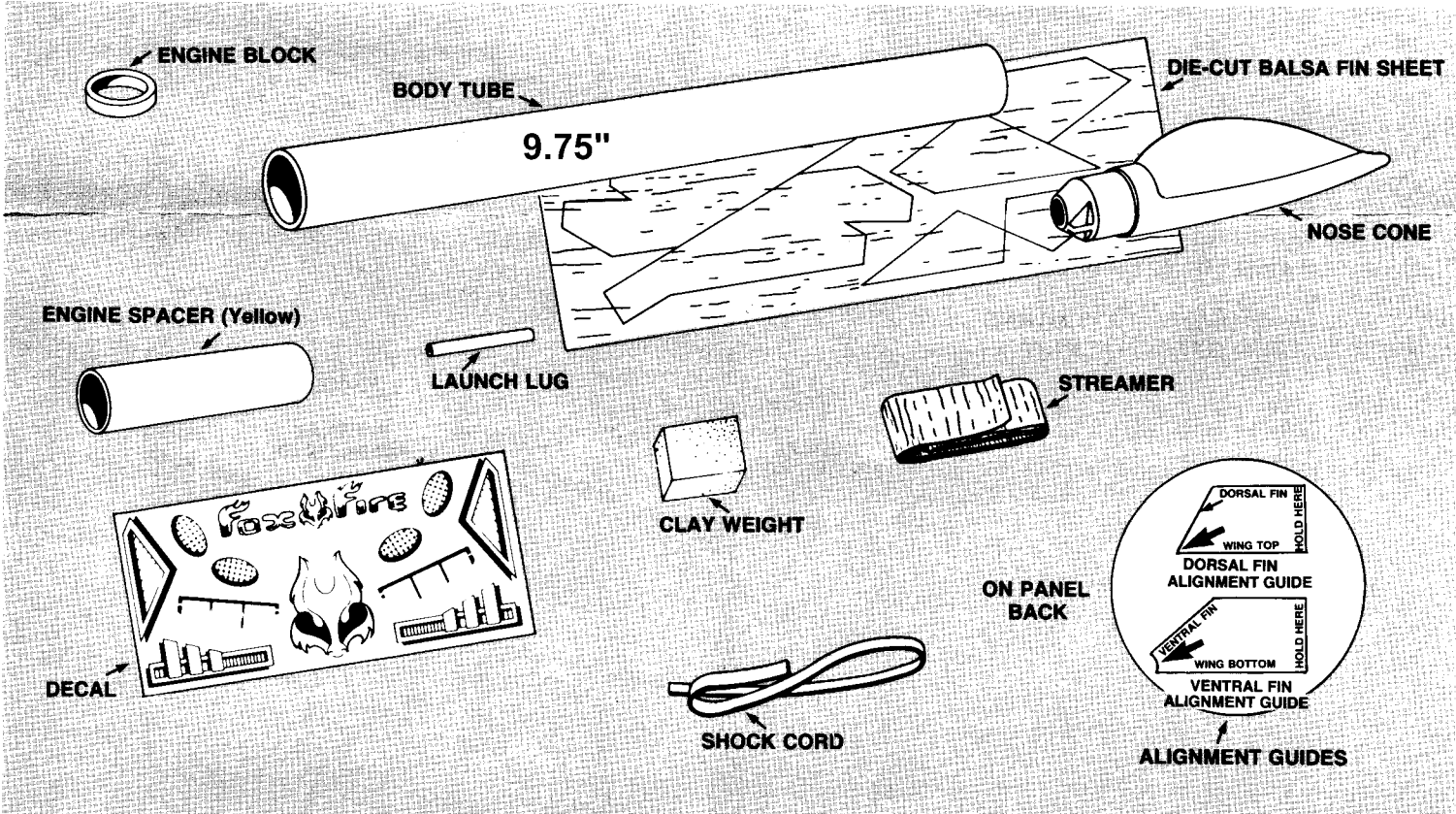
Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

### 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:



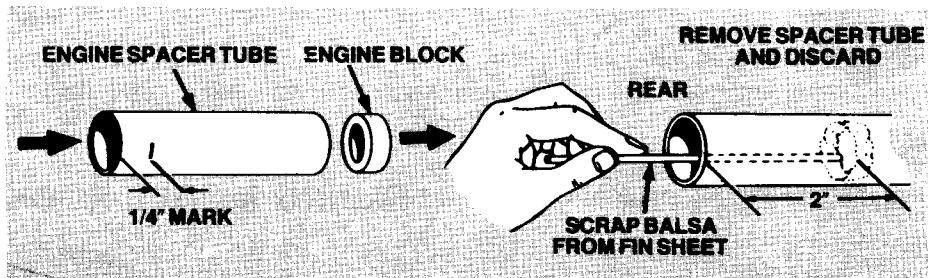
### KIT PARTS:



# ROCKET ASSEMBLY

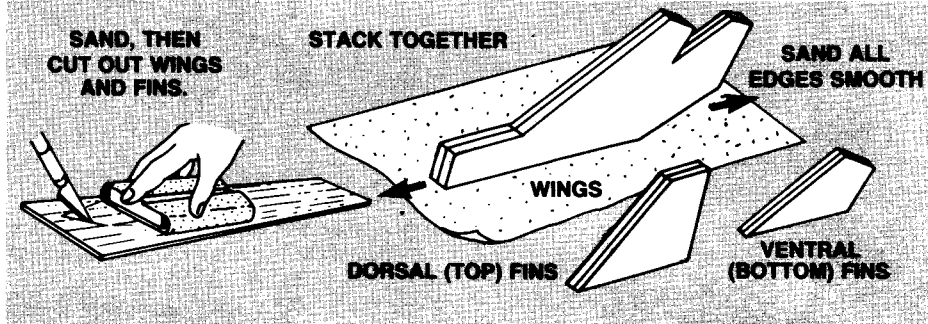
## 1

- Mark spacer tube 1/4 inch from one end.
- Using a piece of scrap balsa, smear glue inside body tube 2 inches from one end.
- Push engine block up into body tube with spacer tube until 1/4 inch mark is even with end of body tube and remove spacer tube immediately.



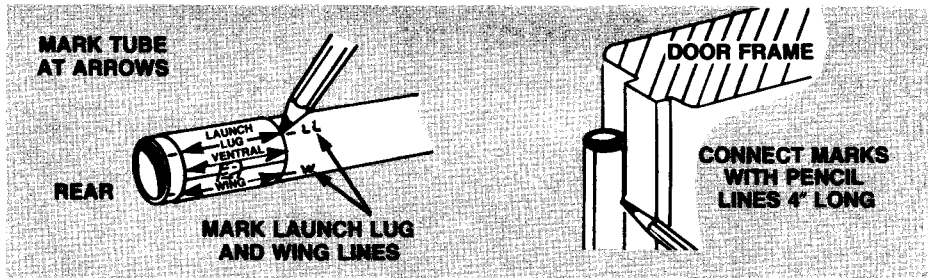
## 2

- Fine sand balsa die-cut sheet. Carefully remove wings and fins by freeing edges with sharp knife.
- Stack wings together and sand all edges smooth. Repeat process with each pair of fins.



## 3

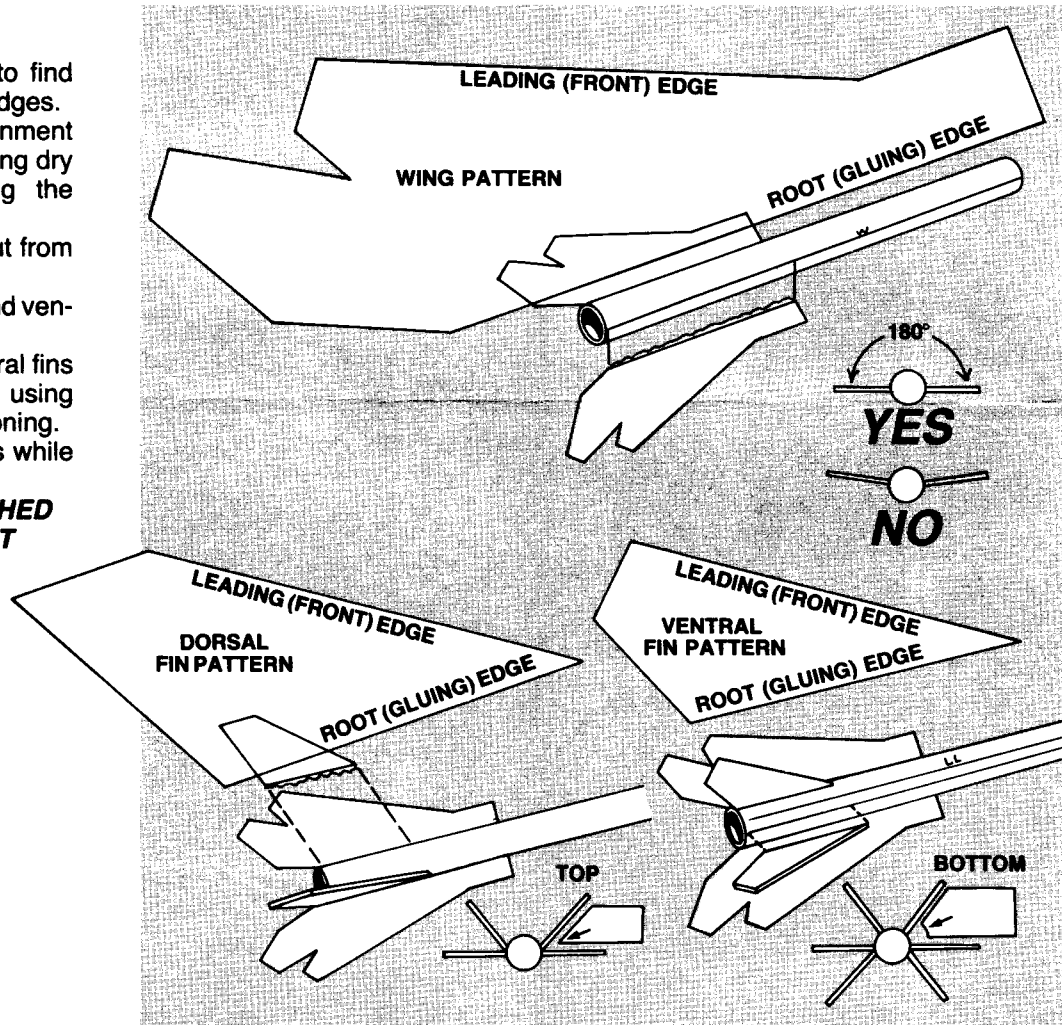
- Cut out tube marking guide from front page.
- Wrap guide around tube and mark tube at arrows. Mark wing and launch lug lines.
- Remove guide from tube.
- Draw 4 inch long straight lines to connect each pair of marks.



## 4

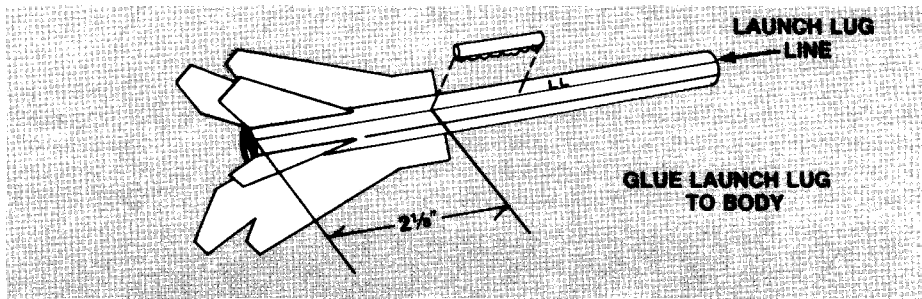
- Lay wings and fins on patterns to find gluing (root) and front (leading) edges.
- Position and glue wings on alignment lines one at a time. Let the first wing dry several minutes before applying the other one.
- Adjust wings to project straight out from tube as shown.
- Cut alignment guides for dorsal and ventral fins from panel back.
- Position and glue dorsal and ventral fins to body as shown in illustrations, using alignment guides for exact positioning.
- Do not set rocket on wings or fins while glue is wet.

**WINGS AND FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT**



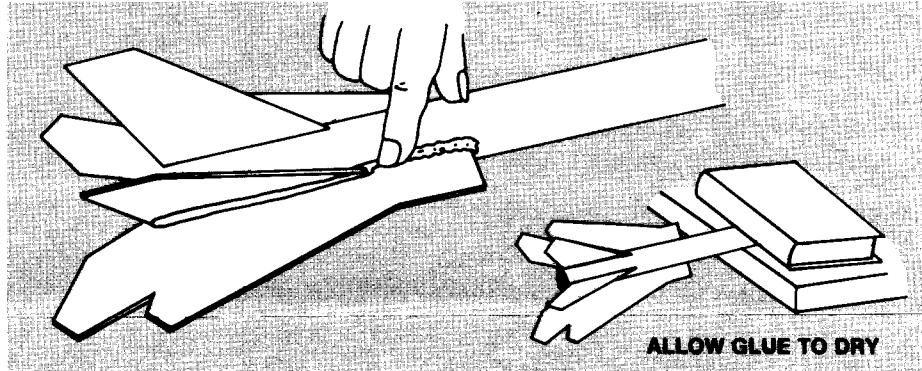
## 5

- A. Glue launch lug straight on launch lug line with its rear edge  $2\frac{1}{8}$  inches from rear of tube.



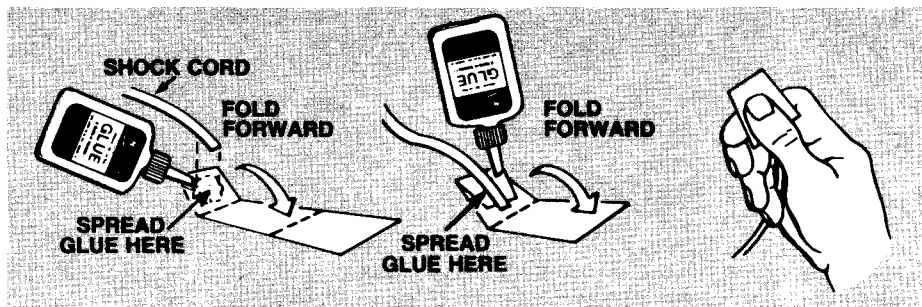
## 6

- A. Apply a glue reinforcement to both sides of each wing/body and fin/body joint and each side of launch lug.  
B. Support rocket as shown until glue dries.



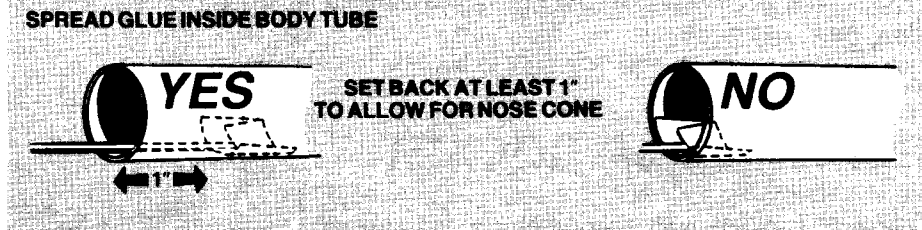
## 7

- A. Cut shock cord mount from front page.  
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.



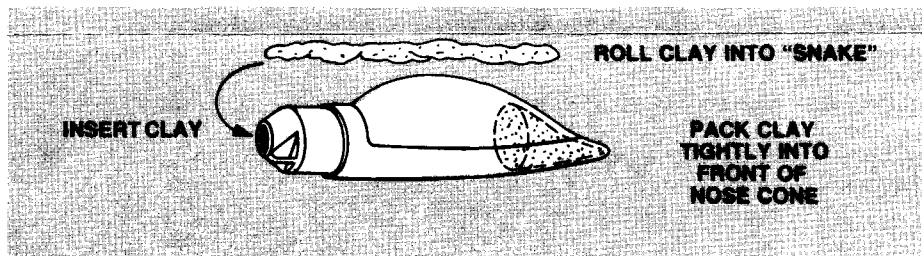
## 8

- A. Apply glue to inside front of 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.



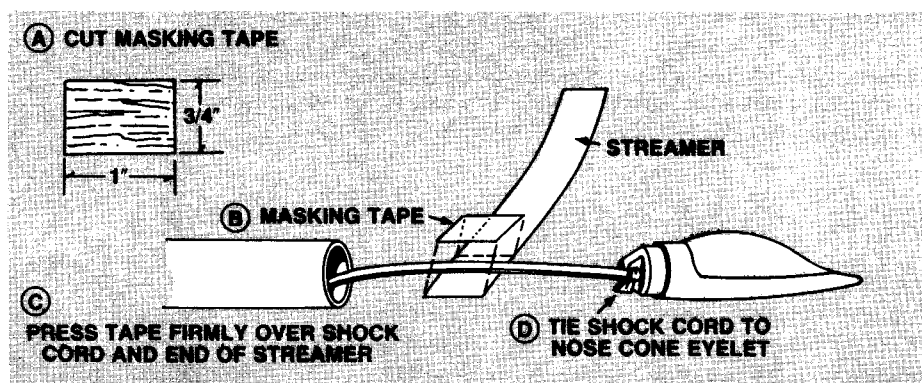
## 9

- A. Roll clay weight into a "snake", and insert through hole in end of nose cone.  
B. Using a pencil or dowel, tightly pack clay into front end of nose cone.



## 10

- A. Cut a 1 inch long piece of  $\frac{3}{4}$  inch wide masking tape.  
B. Lay center of shock cord over end of streamer material as shown, and tape shock cord and streamer together.  
C. Press tape down firmly to assure a strong bond.  
D. Tie shock cord to nose cone eyelet.

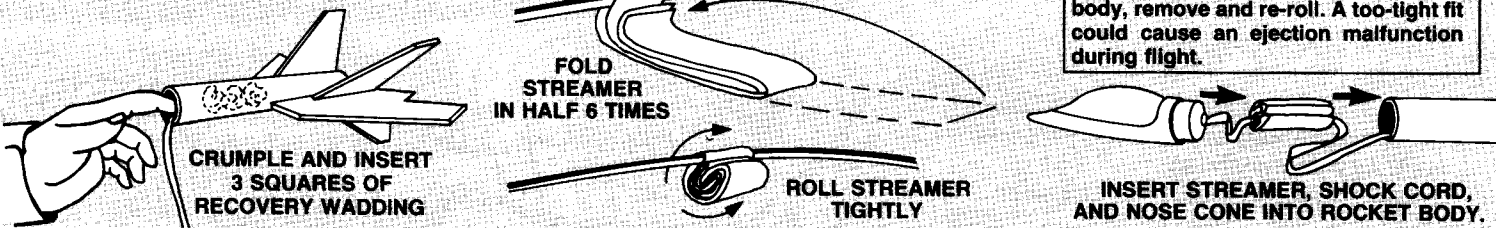


# FINISHING YOUR ROCKET

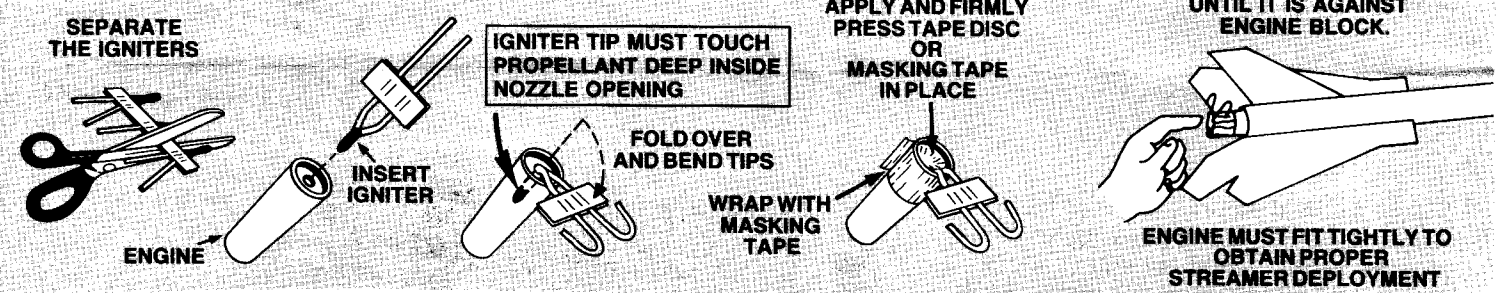
Apply sanding sealer to wood parts with small brush. When sealer is dry, lightly sand all sealed surfaces. Repeat sealing and sanding until balsa grain is filled and smooth. When sanding sealer and glue are completely dry, paint model with spray enamel. Follow instructions on spray can for best results. Let paint dry overnight before masking to paint canopy on nose cone. To apply decals, cut each out, dip in

lukewarm water for 20 seconds, and hold until it uncurls. Refer to photograph on front page and/or on front of panel for decal placement. Slip decal off backing sheet and onto model. Blot away excess water. For best results, let decals dry overnight and apply a coat of clear spray paint to protect decals.

## ROCKET PREFLIGHT



## PREPARE ENGINE



## LAUNCH SUPPLIES

To launch your rocket you will need the following items:  
 —An Estes model rocket launching system  
 —Estes Recovery Wadding (No. 2274)  
 —Recommended Engines: A8-3, A8-5, B4-4, B4-6, B6-4, B6-6, B8-5, C6-3, C6-5, and C6-7  
 Use an A8-3 engine for your first flight to become familiar with your rocket's flight pattern.

## 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.

Launch area must be free of dry weeds and brown grass.

Launch only during calm weather with little or no wind and good visibility.

## MISFIRES

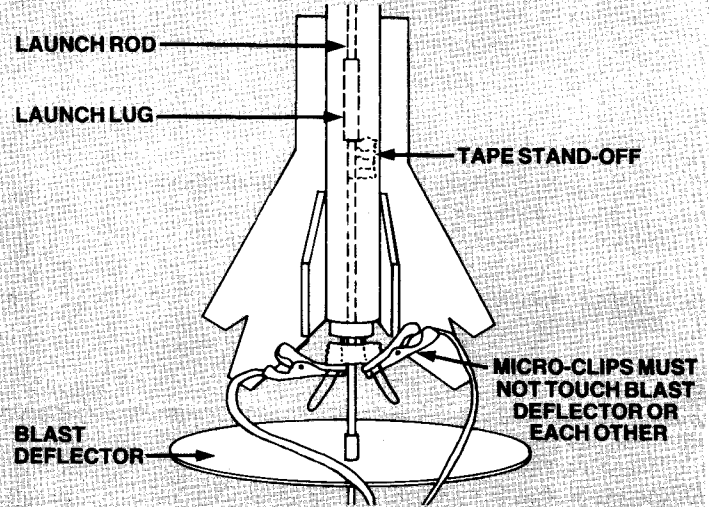
Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.

## FOR YOUR SAFETY AND ENJOYMENT

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

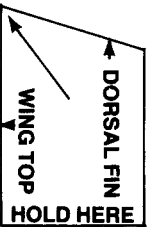
\*National Association of Rocketry-The Hobby Industry of America

## COUNTDOWN AND LAUNCH

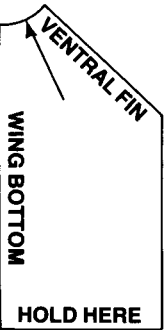


- ⑤ REMOVE SAFETY KEY to disarm the launch controller.
- ④ Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- ③ Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.
- ② Move back from your rocket as far as launch wire will permit (at least 15 feet).
- ① INSERT SAFETY KEY to arm the launch controller.

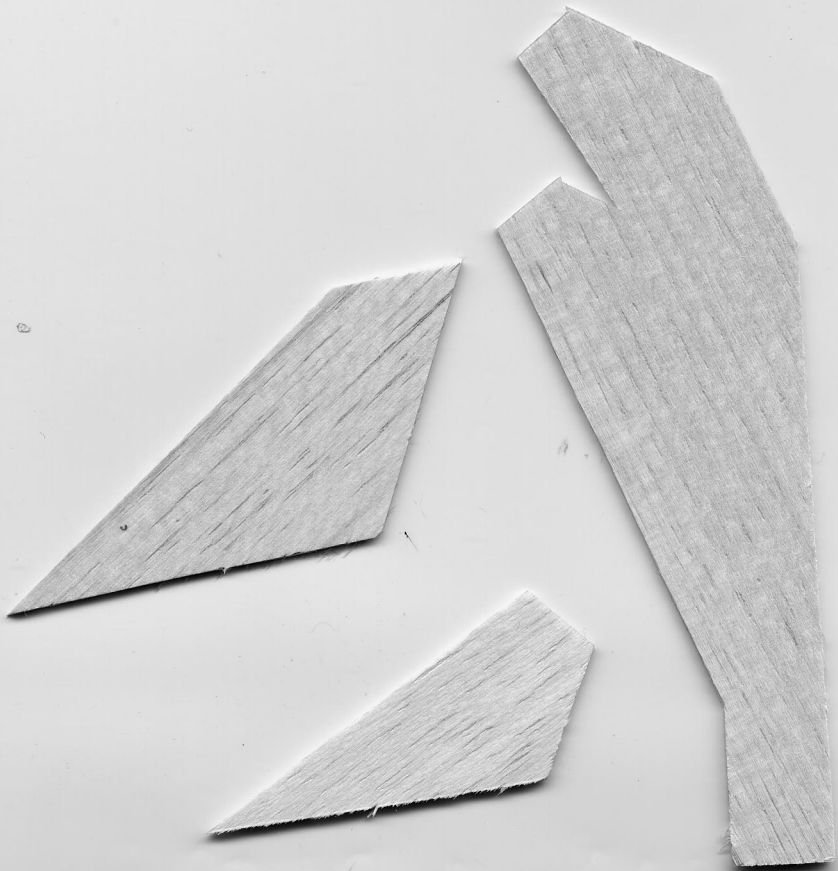
**LAUNCH!!!** PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES  
 Remove safety key—Replace cap on rod.

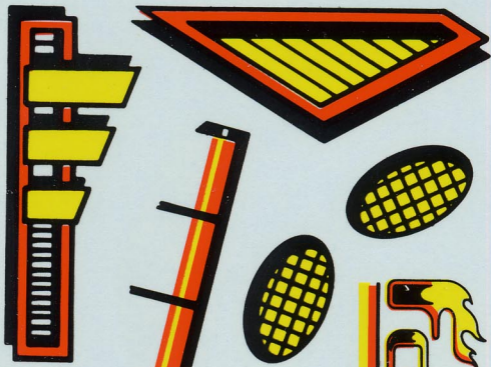


**DORSAL FIN ALIGNMENT GUIDE**

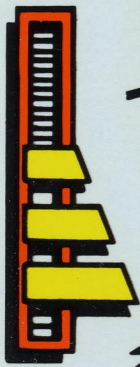


**VENTRAL FIN ALIGNMENT GUIDE**





FOXCREE





# FOX FIRE

## FLYING MODEL ROCKET

- 3 Color Decal
- Fighter From the Future

**FLIGHTS  
UP TO  
1000 FEET!**

### SKILL LEVEL 2

1-Engine, 3-Streamers, 3-Color  
4-Adapted, 3-Feet

Length: 13.6 in. (34.54 cm)

Dia: .976 in. (24.79 mm)

Weight: .69 oz. (19.85 g)

Engine Types: A8-3 (First Flight), A8-5, B4-4, B6-4, B6-6, B6-5, C6-3, C6-5, C6-7

Recommended for ages 10 to adult. Adult supervision suggested for those under 12 years of age when flying model rockets. This is a hobby kit requiring assembly. Engines, launch system, glue and finishing supplies are not included.

#1941

