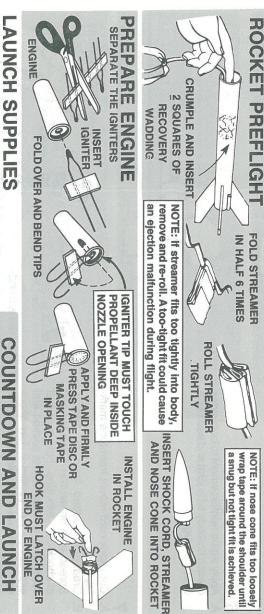
FINISHING YOUR ROCKET

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



AUNCH SUPPLIES

To launch your rocket you will need the following items: –Estes Launch Control System

—Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B4-6, B6-4, B6-6, C6-5, or C6-7 -Estes Recovery Wadding (No. 2274)

our rocket's flight pattern. Use 1/2A6-2 engine for your first flight to become familiar with

FLYING YOUR ROCKET

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

Launch area must be free of dry weeds and brown grass

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

MISFIRES

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

AND ENJOYMENT FOR YOUR SAFETY

CODE while participating in any model rocketry activities. National Association of Rocketry-The Hobby Industry of America Always follow the NAR-HIA* MODEL ROCKETRY SAFETY

DEFLECTOR BLAST LAUNCH ROD-LAUNCH LUG-TOUCH BLAST **EACH OTHER** MICRO-CLIPS MUST NOT DEFLECTOR OR R

- REMOVE SAFETY KEY to disarm the launch con-
- Remove safety cap and slide launch lug over launch
 rod to place rooket on launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- (00) 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.
- Move back from your rocket as far as launch wire will permit, (at least 15 feet).
- INSERT SAFETY KEY to arm the launch controller. Give audible countdown. . .5. . .4. .

Remove safety key—Replace cap on rod **AUNCH!!!**

PENROSE, CO 81240 USA ESTES INDUSTRIES #1459 **ASSEMBLY TIP** parts don't fit properly, sand as required for precision model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any Read all instructions before beginning work on your

SHOCK CORD

MOUNT

SEC. 3

SEC. 2

SEC. 1

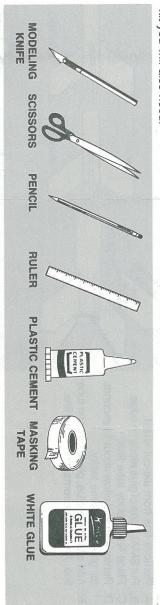
CUT ENGINE HOOK

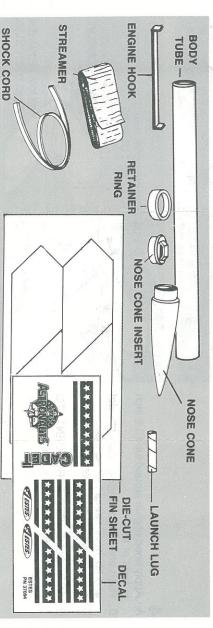
SLOT HERE

TUBE MARKING

PARTS AND SUPPLIES

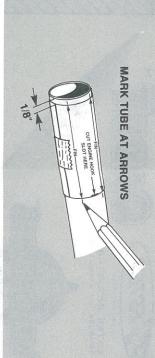
kit you will also need: Locate the parts shown below and lay them out on the table in front of you. In addition to the parts included in the

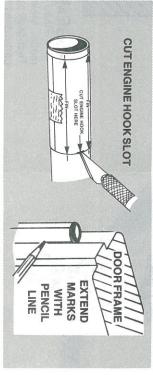


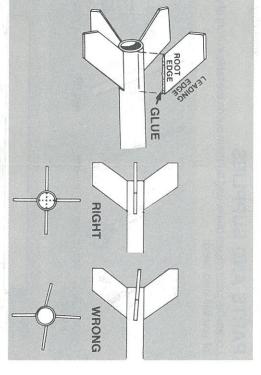


ROCKET ASSEMBLY

- 1 A. Cut out tube marking guide from front
- œ Wrap guide around tube 1/8 inch from one end.
- 0 Mark tube at arrows.—Do not remove guide.







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Add a bit more glue, place back on tube

line. Repeat for remaining three fins.

Remove fin and allow about 15 seconds

for glue to become tacky.

00 m> 6

Put SMALL line of glue along fin edge.

Place fin on body tube line.

Remove fins from die-cut sheet.

0,0

Draw 3 inch long lines for fins and 4

inch line for launch lug.

Remove guide and save for Step #7

>N

Cut 1/8 inch wide engine hook slit in

tube next to mark on tube marking

2 <

- in front of fins.
- 9 Slide retainer ring over engine hook and and lay hook straight along tube.
- D.
- Apply bead of glue around tube 3/8 inch
- Ē Push one end of engine hook into slot
- down to edge of fins.

 ADD GLUE REINFORCEMENT TO ENGINE HOOK AS SHOWN.

PUSH ENGINE HOOK IN SLOT-LAYSTRAIGHT ON TUBE REINFORCEMENT RING OVER GLUE SLIDE RETAINER ADD GLUE

> 5 Glue launch lug straight on launch lug line with its rear edge against retainer

> o Apply a glue reinforcement to both sides of each fin/body tube joint and each side

of launch lug.

ing guide. Cut shock cord mount from tube mark-

CLAMP WITH FINGERS

œ Crease on dotted lines by folding. cord as shown and fold mount over exposed part of section 2. Lay shock apply glue to back of first section and of shock cord into glue. Fold over and Spread glue on section 1 and lay end

again.

C. Clamp unit together with fingers until glue sets.

- 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.
- Press mount firmly into glue as shown. Hold until glue sets

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P insert with plastic cement. Assemble nose cone and nose cone

APPLY

Œ When dry, tie free end of shock cord to nose loop with double knot.

- A. Cut a 1 inch long piece of 3/4 inch wide masking tape.
- B. Lay end of shock cord over end of shock cord and streamer together. streamer material as shown, and tape
- C. Press tape down firmly to assure a

