

Leprechaun™

FLYING MODEL ROCKET

FLIES
TO
900 FEET

SKILL LEVEL 1

Recommended for the Beginning Modeler.

- EASY TO ASSEMBLE!
- Plastic Nose Cone, Fin Unit, & Launch Lug
- Streamer Recovery
- Engine Hook

Length: 10.25 in. (26 cm)

Dia: .544 in. (13.8 mm)

Weight: .42 oz. (12 g)

Recommended Engines:

1/2A3-4T (First Flight) or A3-4T



ESTES

A DAMON COMPANY

ESTES INDUSTRIES
PENROSE, CO 81240 USA



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



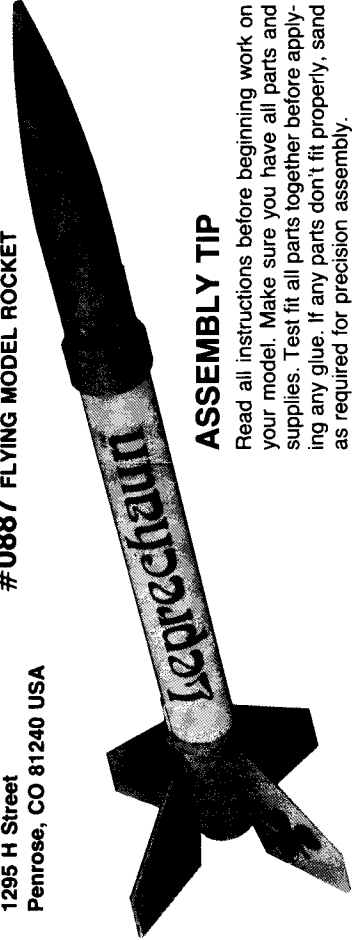
#0887

Leprechaun™

#0887 FLYING MODEL ROCKET

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1295 H Street
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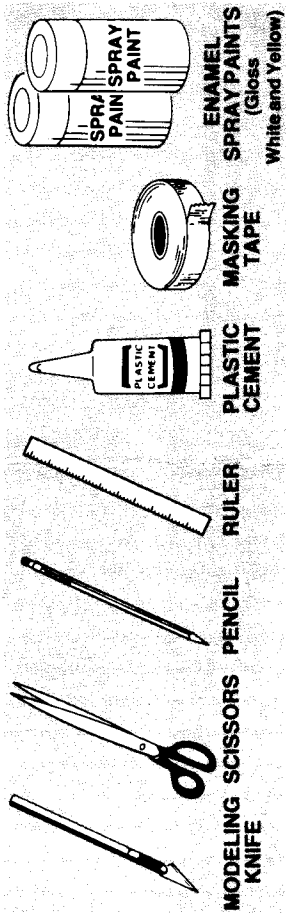


ASSEMBLY TIP

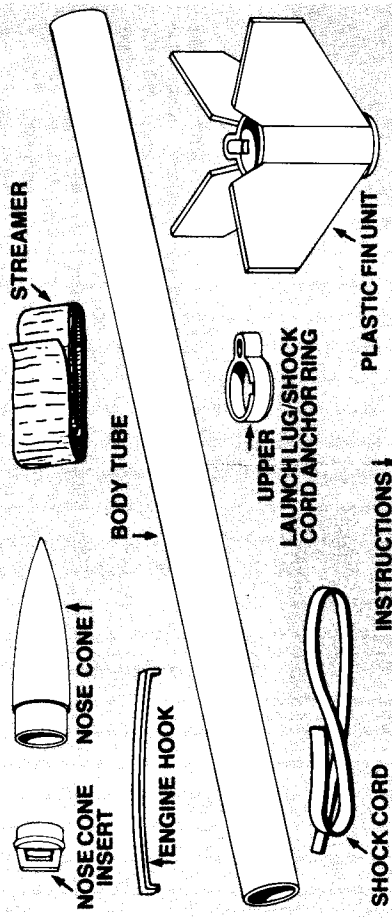
Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

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



ESTES
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1295 H Street
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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:

MODELING SCISSORS **PENCIL** **RULER**
NOSE CONE INSERT **NOSE CONE** **BODY TUBE**
ENGINE HOOK **UPPER LAUNCH CORD ANCHOR**

INSTRUCTIONS

ESTES INDUSTRIES
PH 37312

ROCKET REFLIGHT FOLD STREAMER IN CRUMPLE AND INSERT HALF 4 TIMES

ROLL STREAMER TIGHTLY

NOTE: If streamer fits too tightly into body, remove and re-roll. A too-tight fit could cause an ejection malfunction during flight.

ROLL STREAMER TIGHTLY

NOTE: If nose cone fits too loosely wrap tape around the shoulder until a snug but not tight fit is achieved.

PREPARE ENGINE SEPARATE THE IGNITERS

IGNITER TIP MUST TOUCH PROPELLANT DEEP INSIDE NOZZLE OPENING

APPLY AND FIRMLY PRESS TAPE DISC OR MASKING TAPE IN PLACE

INSERT SHOCK CORD. STREAMER AND NOSE CONE INTO ROCKET

PUSH ENGINE INTO ROCKET

HOOK MUST BE LOCKED OVER END OF ENGINE

FOLD OVER AND BEND TIPS

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: 1/2A3-4T or A3-4T

Use a 1/2A3-4T 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.

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

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COUNTDOWN AND LAUNCH

LAUNCH ROD MUST PASS THROUGH BOTH LAUNCH LUGS.

LAUNCH ROD

MASKING TAPE STAND-OFF

BLAST DEFLECTOR

MICRO-CLIPS MUST NOT TOUCH BLAST DEFLECTOR OR EACH OTHER.

REMOVE SAFETY KEY TO disarm the launch controller.

- Remove safety cap and slide launch lugs over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- 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 . 3 . 2 . 1 .

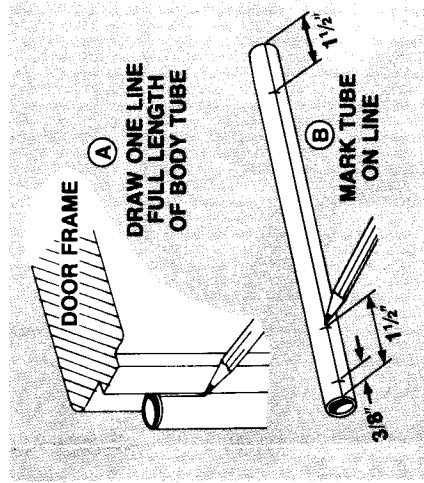
LAUNCH!!!

PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

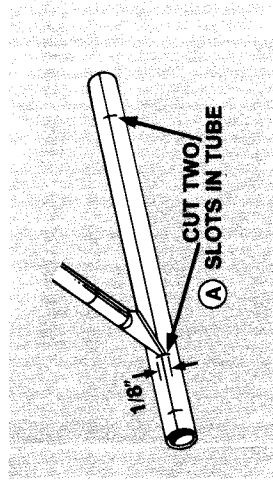
Remove safety key—Replace cap on rod.

ROCKET ASSEMBLY

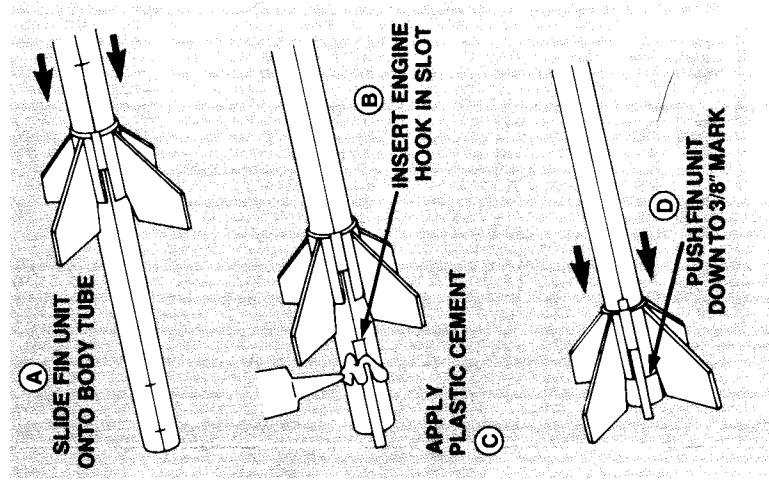
- Use a ruler or door frame to draw a single straight line the length of the body tube with a pencil.
 - Mark the line at $1\frac{1}{2}$ inches from both ends of the tube and $3/8$ inch from one end of the tube. Make the mark at $3/8$ inch about $1/2$ inch long.



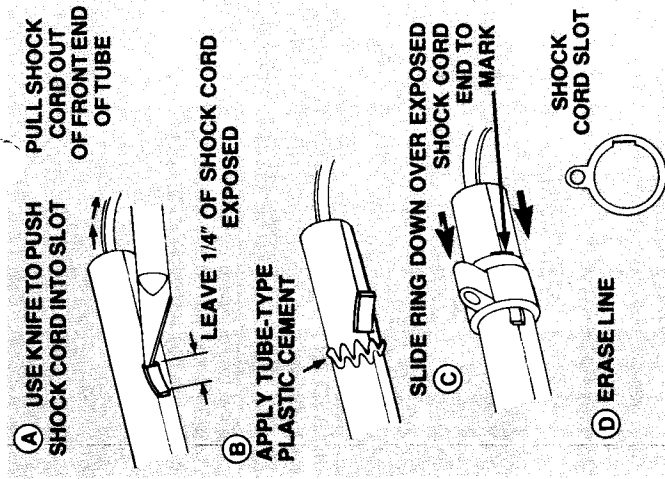
- Cut a $1/8$ inch wide slot at the marks as shown. Do not cut a slot at the $3/8$ inch mark.



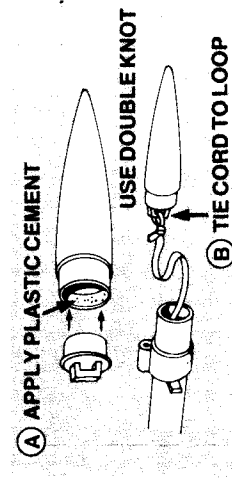
- Slide the fin unit onto the body tube and position it about halfway along the tube.
 - Insert one end of the engine hook into the slot on the end of the tube with the $3/8$ inch mark as shown.
 - Apply tube-type plastic cement around the body tube in a "zig-zag" fashion as shown in the illustration.
 - Push the fin unit down and over the engine hook. Continue pushing until the rear of the fin unit touches the $3/8$ inch mark. Carefully wipe away any excess plastic cement.



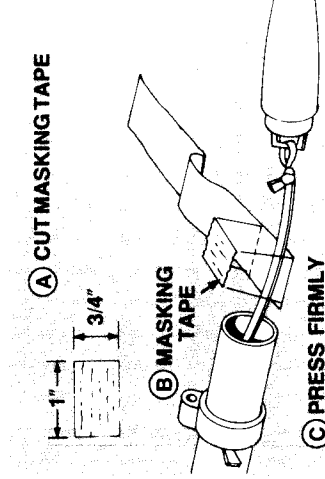
- Use a modeling knife or pencil to push one end of the shock cord into the remaining slot. Pull the shock cord through the slot and out the forward end of the body tube leaving $1/4$ inch exposed as shown.
 - Smear a band of plastic cement around the body tube just behind the protruding shock cord.
 - Position the launch lug ring on the body tube noting the shock cord slot. Push the ring down over the shock cord until the forward edge of the ring is even with the shock cord slot.
 - Erase pencil line on body tube with pencil eraser.



- Assemble nose cone and nose cone insert with plastic cement.
 - When dry, tie free end of shock cord to nose loop with double knot.



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



FINISHING YOUR ROCKET

When all glue is completely dry, paint model with spray enamel. Avoid lacquer based paints. Refer to photograph on front page and/or front of panel for paint locations and decal placement. Follow instructions on spray can for best results. Let paint dry overnight before applying decals. To apply decals, cut each out, dip in lukewarm water for 20 seconds, and hold until it uncurls. Refer to photograph 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.