

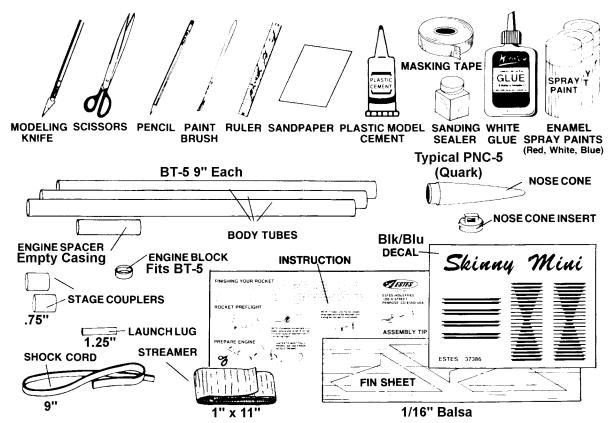




Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assem-

#### 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

- A. Mark the yellow spacer tube 1/4 inch from one end.
- B. Apply white glue inside the end of one of the 9 inch body tubes 1 inch from the end.
- C. Using the engine spacer tube, push the engine block up into the end of the body tube with the glue in it until the mark on the engine spacer tube is even with the end of the body tube. Remove the engine spacer IMMEDIATELY.

#### 2

- A. Fine sand balsa die-cut sheet. Carefully remove fins by freeing edges with sharp knife.
- B. Stack fins together. Sand all edges smooth.

- A. Cut out tube marking guide from front page. B. Mark end of body tube which has engine
- block in it 1/4 inch from end and tape marking guide around tube so rear edge of guide is even with 1/4 inch mark. C. Mark tube at arrows and across fin lines at rear of guide. Remove guide and < draw 3 inch long lines for fins and 6 inch line for launch lug.

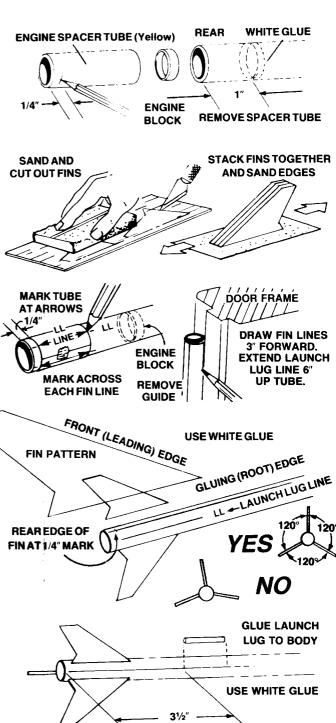
#### 4

- A. Lay fins on pattern to find gluing (root) and front (leading) edges. B. Position and glue fins on alignment lines
- one at a time. Let each dry several minutes before applying the next one.
- C. Adjust fins to project straight out from tube.
- D. Do not set rocket on fins while glue is wet.

#### FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!

## 5

A. Glue launch lug straight on launch lug line with its rear edge 31/2 inches from rear of tube.

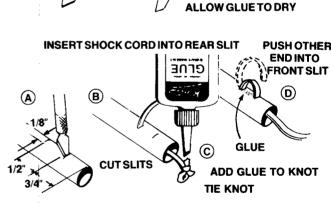


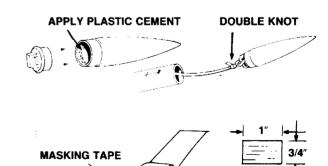
A. Apply white glue inside one end of each of the remaining two 9 inch body tubes. Push a stage coupler into the glued end of each tube so 3/8 inch of the coupler

WHITE GLUE

INSERT COUPLER ENDS INTO GLUED ENDS BE SURE ALL TUBES ARE STRAIGHT.







sticks out of the tube end. B. Apply glue to tube with fins on it inside its opposite end. Apply glue inside one of the tubes with a coupler installed in it. C. Push the coupler end of each of the two body tubes into the tube ends with the alue in them.

sure all three tubes are straight. Allow to dry completely. A. Apply a glue reinforcement to both sides

D. Roll the assembly on a flat surface to be

of launch lug. B. Support rocket as shown until glue dries. 8

A. Cut two 1/8 inch wide slits in forward end

of body tube as shown. Cut both ends

of each fin/body tube joint and each side

of shock cord at an angle. B. Insert one end of shock cord into rear slit and pull through forward end of tube about 3 inches. Tie double knot near end of shock cord. Put drop of glue on knot. Pull shock cord

back into tube so knot is tight against slit.

D. Pass other end of shock cord through

forward slit in body tube. NOTE: Be sure shock cord is not twisted. .E. Run line of glue on body tube between slit and pull cord down onto glue.

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

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

6

A. Cut a 1 inch long piece of 3/4 inch wide masking tape.

B. Lay center of shock cord over end of streamer material as shown. Tape shock cord and streamer together.

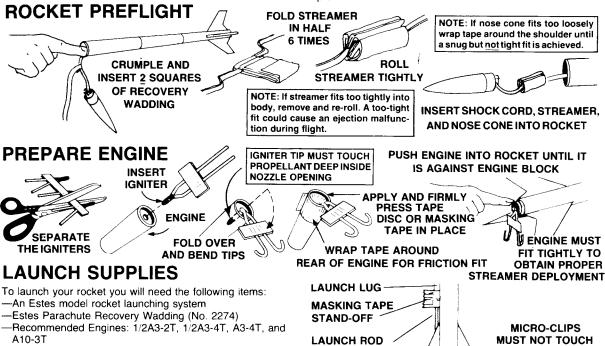
C. Press tape down firmly to assure a strong bond.

**CUT MASKING TAPE** 

#### 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. Refer to photograph on front page and/or on front of panel for paint locations and decal placement. Follow instruc-

tions on spray can for best results. Let paint dry overnight before masking to paint other colors. 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 gloss paint to protect decals.



BLAST

**DEFLECTOR** 

Use only Estes products to launch this rocket.

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.

Use 1/2A3-2T engine for your first flight, to become familiar

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

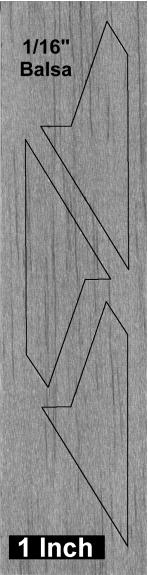
- 5 REMOVE SAFETY KEY to disarm the launch controller.
- Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the metal 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).
- (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.

**BLAST DEFLECTOR** 

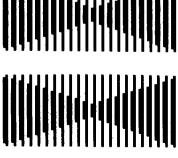
OR EACH OTHER



# 

**ESTES** 

37386



Mini

# Skinny Mini

### FLYING MODEL ROCKET

SKILL LEVEL 1

- · Almost 21/2 Ft. Tall
- Streamer Recovery
- Die-Cut Balss Fins
  Plastic Nose Core

Langth: 20440 ( 47 cm) Star Strick (167 cm) Weight: 52 cm (16.5 cm)

10AD 27 Over Pages.



#0880

FLIGHTS OVER 700 FEET



STAN DOLUTION

