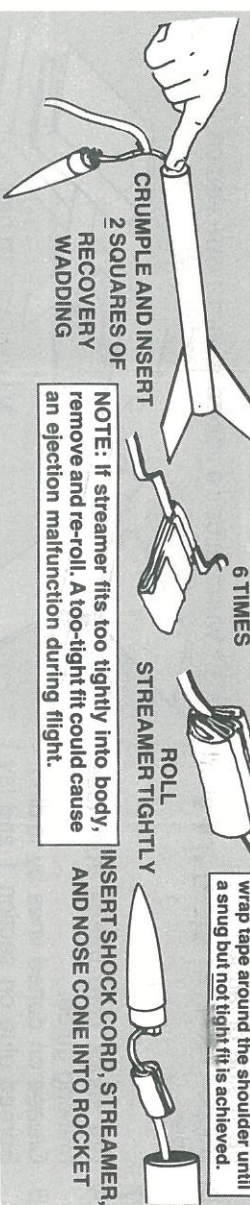


FINISHING YOUR ROCKET

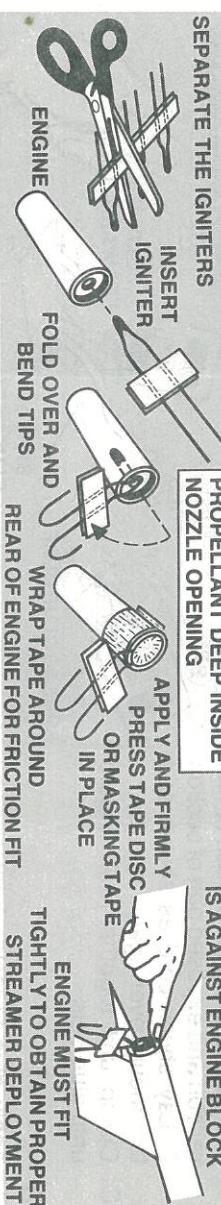
Apply sanding sealer to wood parts with small brush. When sealer is dry, lightly sand all sealed surfaces. Repeat sealing and sanding until bales grain is filled and smooth. When sanding sealer and glue are completely dry, paint model with spray enamel. Refer to photograph on front page and/or on front of panel for paint locations and decal placement. Paint body

gloss black and nose cone bright silver. 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 and apply a coat of clear gloss 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: 1/2A6-2, A8-3, B4-4, B6-4, or C6-5
- Use 1/2A6-2 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

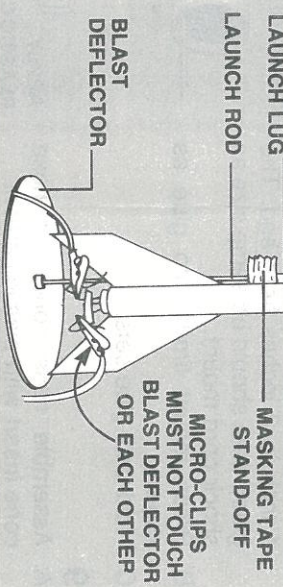
Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.

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



- 1 REMOVE SAFETY KEY to disarm the launch controller.
- 2 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.
- 4 Move back from your rocket as far as launch wire will permit (at least 15 feet).
- 5 INSERT SAFETY KEY to arm the launch controller. **LAUNCH!!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES** Remove safety key—Replace cap on rod.



A DAKOTA COMPANY

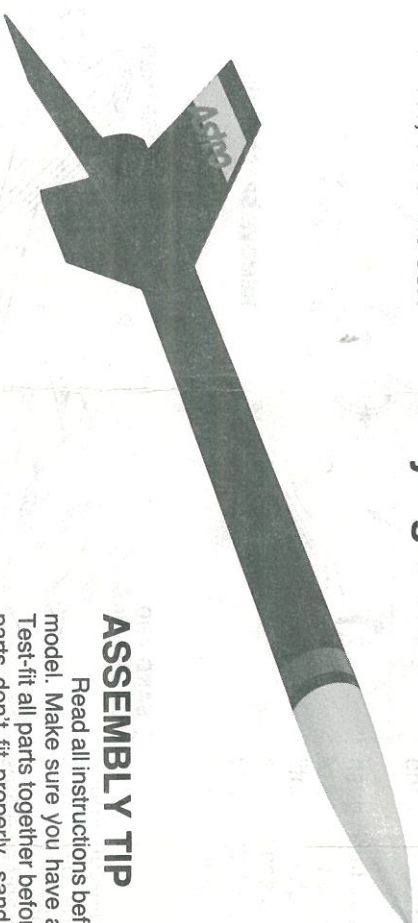
ESTES INDUSTRIES

1295 H Street

Penrose, CO 81240 USA

AstroTM #1937

Flying Model Rocket

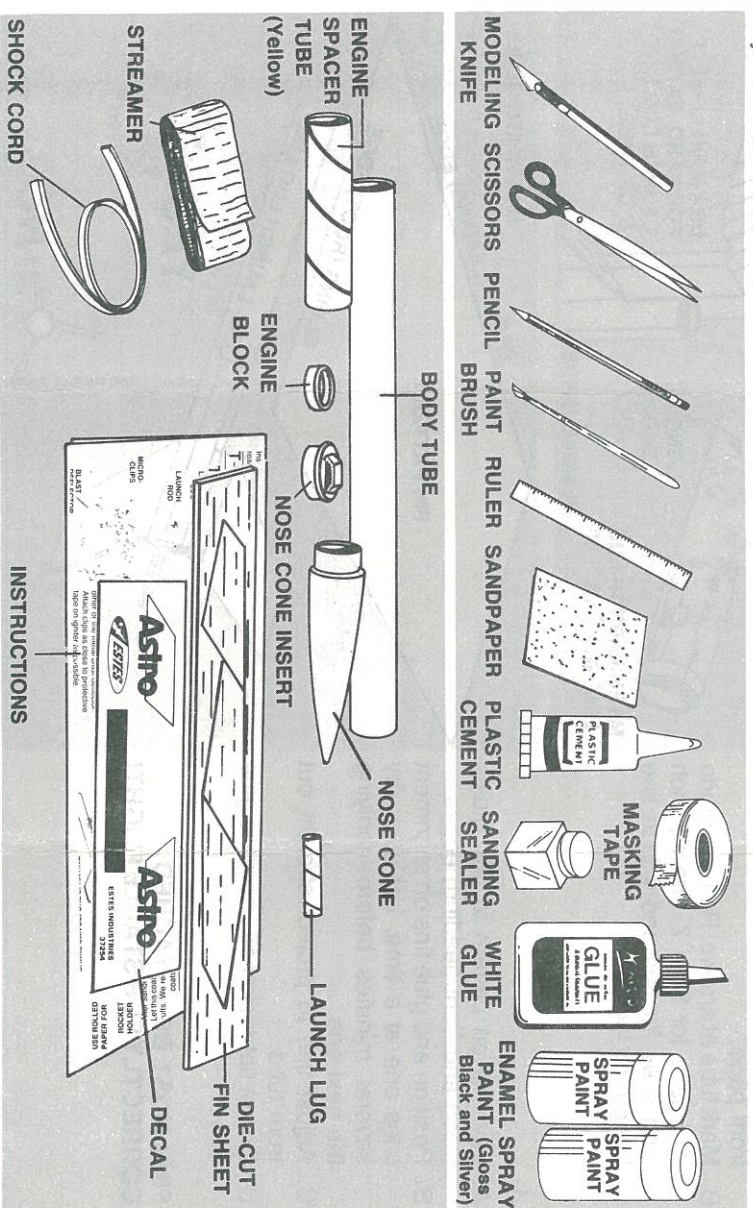


ASSEMBLY TIP

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.

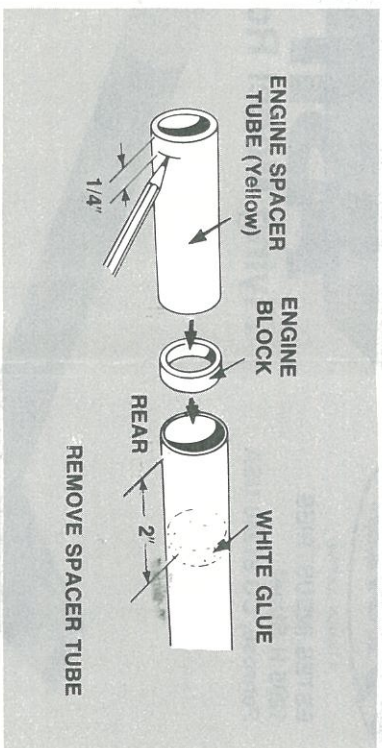
PARTS AND SUPPLIES

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:

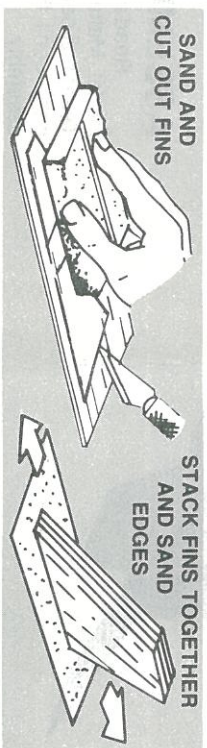


ROCKET ASSEMBLY

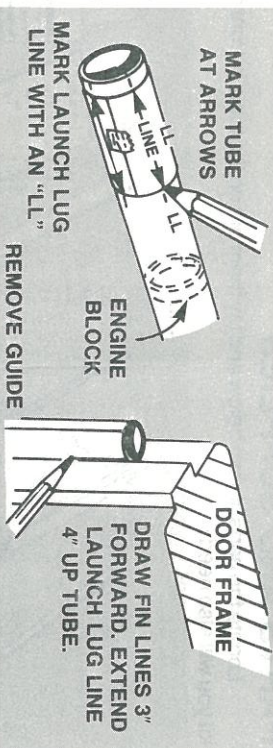
- 1 Mark the yellow spacer tube 1/4 inch from one end.
- 2 Apply white glue inside one end of the body tube 2 inches from the end.
- 3 Using the engine spacer tube, push the engine block up into the end of the body tube with the glue in it until the mark on the engine spacer tube is even with the end of the body tube. Remove the engine spacer IMMEDIATELY.



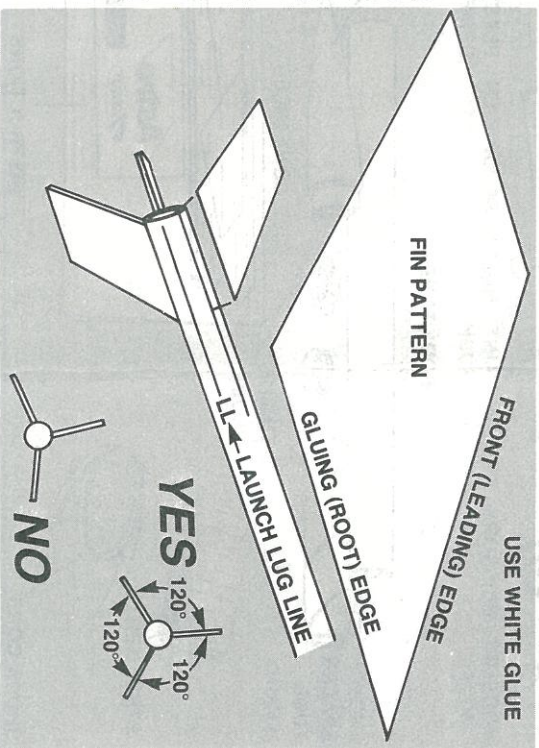
- 4 Fine sand balsa die-cut sheet. Carefully remove fins by freeing edges with sharp knife.
- 5 Stack fins together. Sand all edges smooth.



- 6 Cut out tube marking guide from front page.
- 7 Mark tube at arrows. Remove guide and save for Step 7. Draw 3 inch long lines for fins and 4 inch line for launch lug.

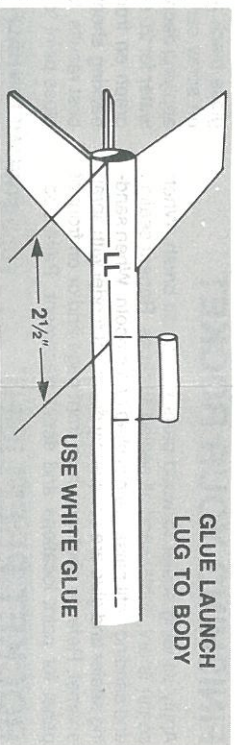


- 8 Lay fins on pattern to find gluing (root) and front (leading) edges.
- 9 Position and glue fins on alignment lines one at a time. Let each dry several minutes before applying the next one.
- 10 Adjust fins to project straight out from tube.
- 11 Do not set rocket on fins while glue is wet.

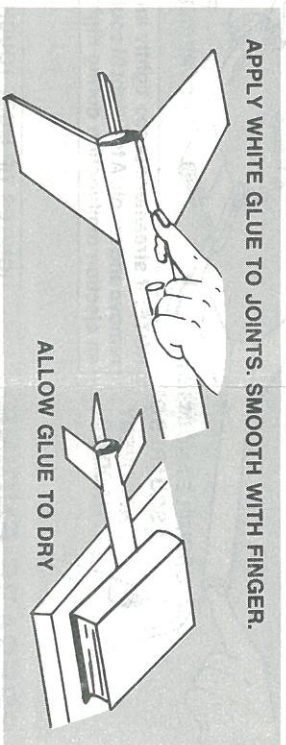


FINN MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!

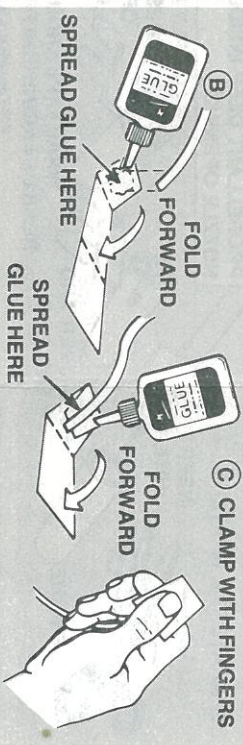
- 12 Glue launch lug straight on launch lug line with its rear edge 2 1/2 inches from rear of tube.



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



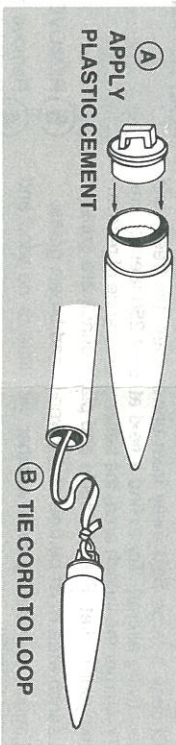
- 15 Cut shock cord mount from tube marking guide.
- 16 Crease on dotted lines by folding. Spread glue on section 1 and lay end of shock cord into glue. Fold over and apply glue to back of first section and exposed part of section 2. Lay shock cord as shown and fold mount over again.
- 17 Clamp unit together with fingers until glue sets.



- 18 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.
- 19 Press mount firmly into glue as shown.
- 20 Hold until glue sets.



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



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

