

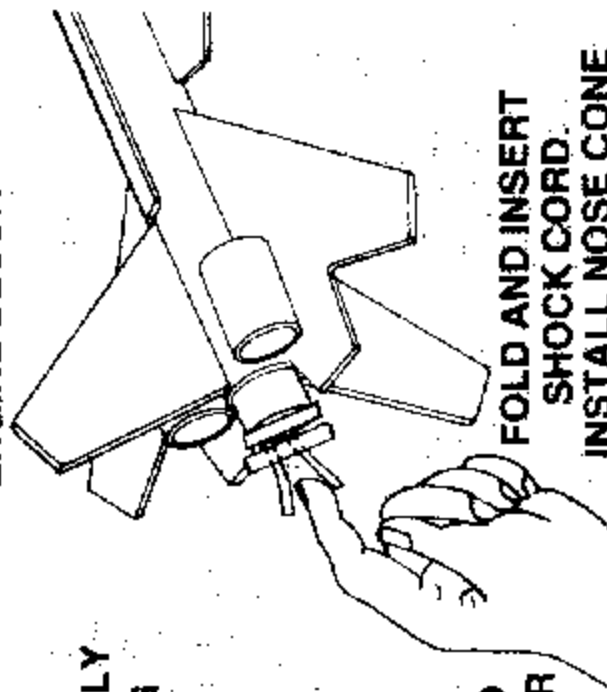
LAUNCH SUPPLIES

To launch your rocket you will need the following items:
 —An Estes model rocket launching system
 —Recommended Engines: 1/2A3-2T, A3-4T, or A10-3T
 Use 1/2A3-2T engine for your first flight, to become familiar with your rocket's flight pattern.

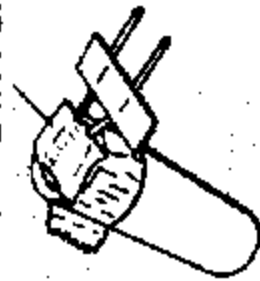
MISFIRES

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.

PUSH ENGINE INTO ROCKET UNTIL IT IS AGAINST ENGINE BLOCK



APPLY AND FIRMLY PRESS MASKING TAPE IN PLACE



WRAP TAPE AROUND REAR OF ENGINE FOR FRICTION FIT

FOLD AND INSERT SHOCK CORD. INSTALL NOSE CONE

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.



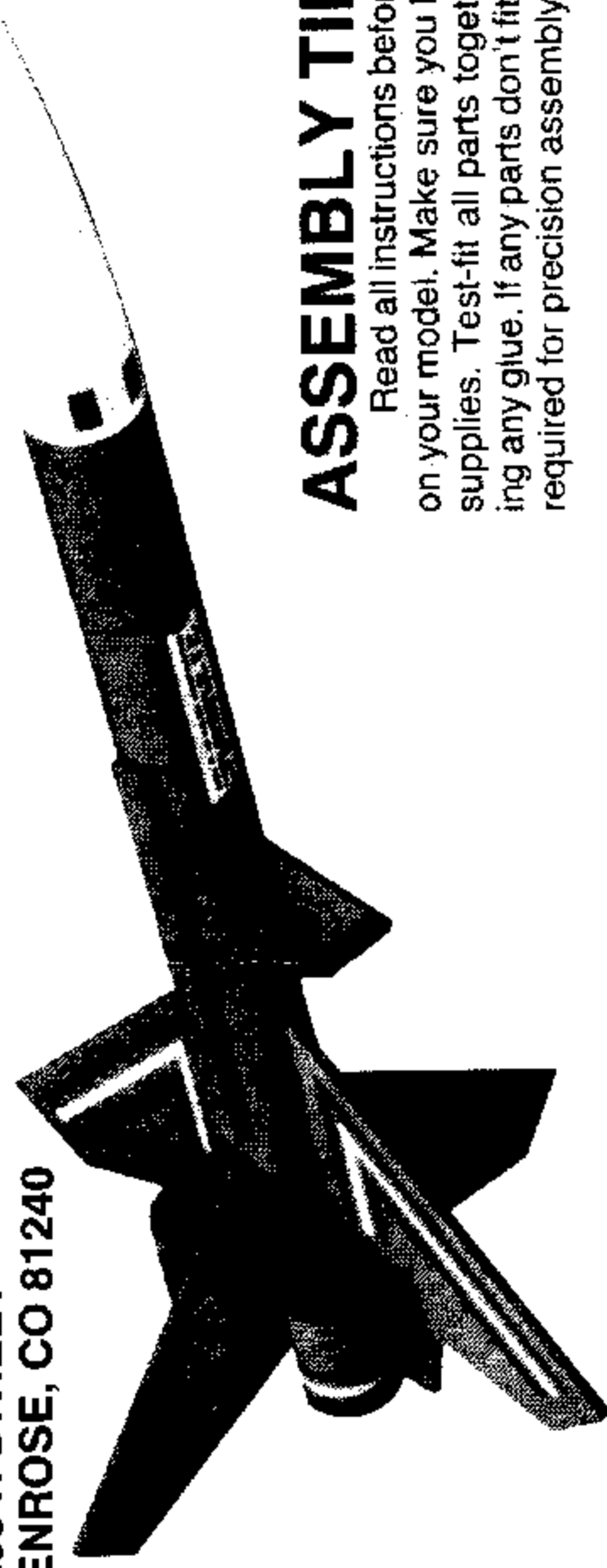
A DAMON COMPANY

ESTES INDUSTRIES
 1295 H STREET
 PENROSE, CO 81240

STRAWWEE

Flying Model Rocket

#0873

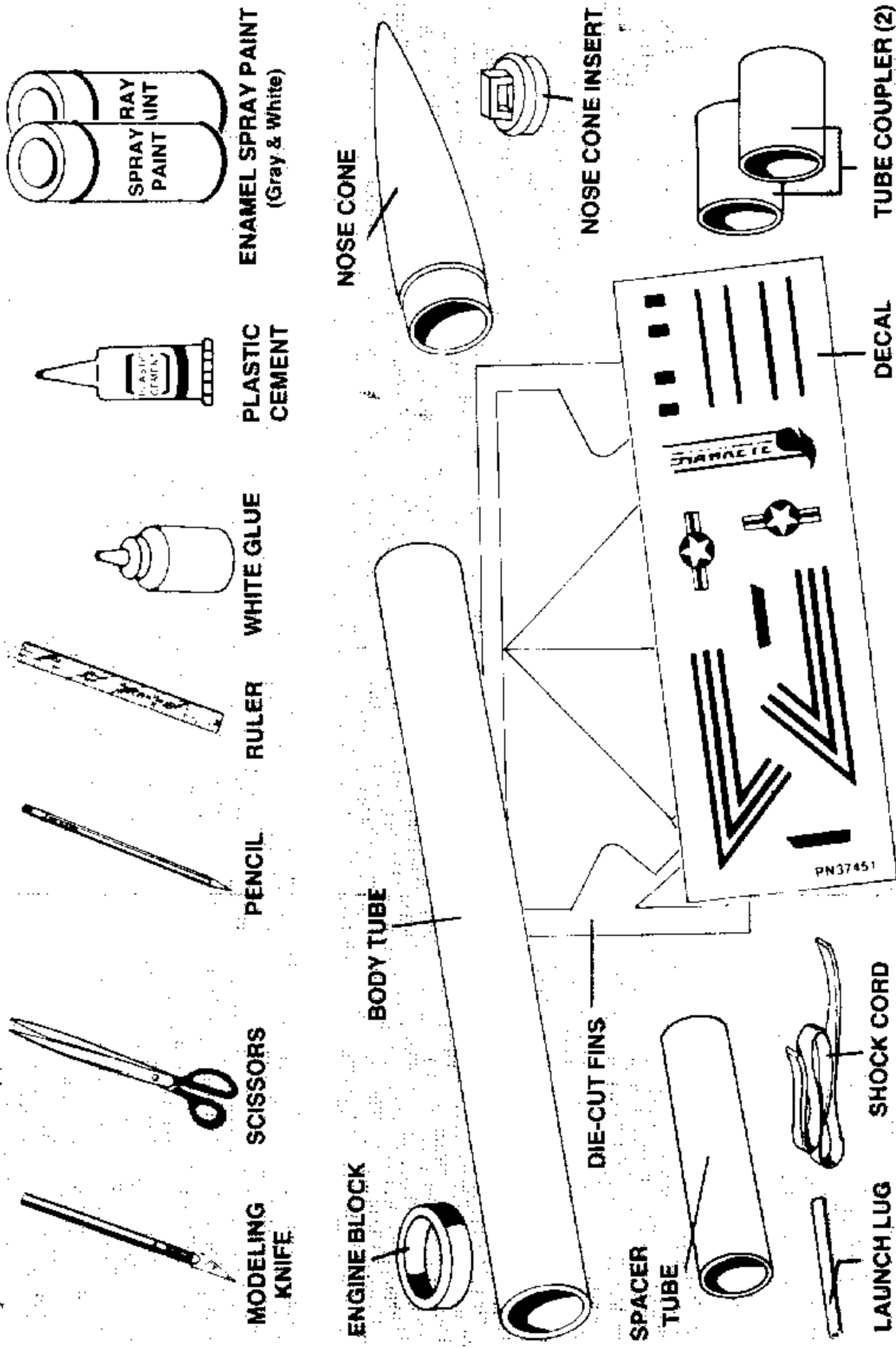


ASSEMBLY TIP

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 need the supplies shown.



FLYING YOUR ROCKET

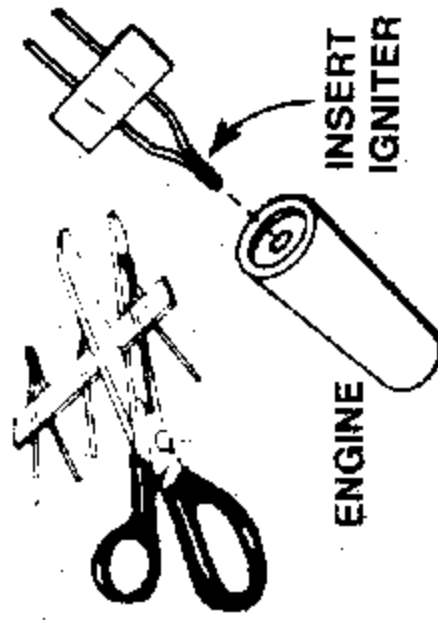
Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 250 feet square. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great.

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

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

PREPARE ENGINE

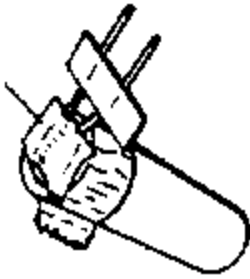
SEPARATE THE IGNITERS



IGNITER TIP MUST TOUCH PROPELLANT DEEP INSIDE NOZZLE OPENING

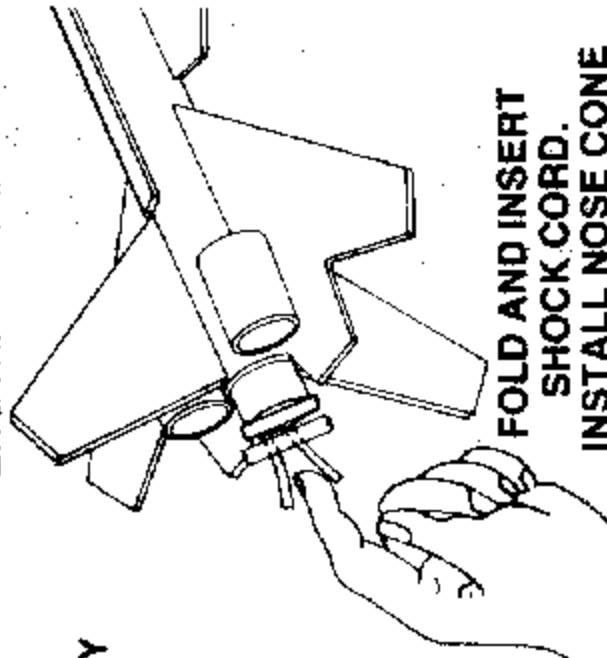


APPLY AND FIRMLY PRESS MASKING TAPE IN PLACE



WRAP TAPE AROUND REAR OF ENGINE FOR FRICTION FIT

PUSH ENGINE INTO ROCKET UNTIL IT IS AGAINST ENGINE BLOCK



LAUNCH SUPPLIES

To launch your rocket you will need the following items:

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PARTS AND SUPP

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MODELING KNIFE

SCISSORS

PE

ENGINE BLOCK



BODY TUBE



SPACER TUBE

DIE-CUT FINS

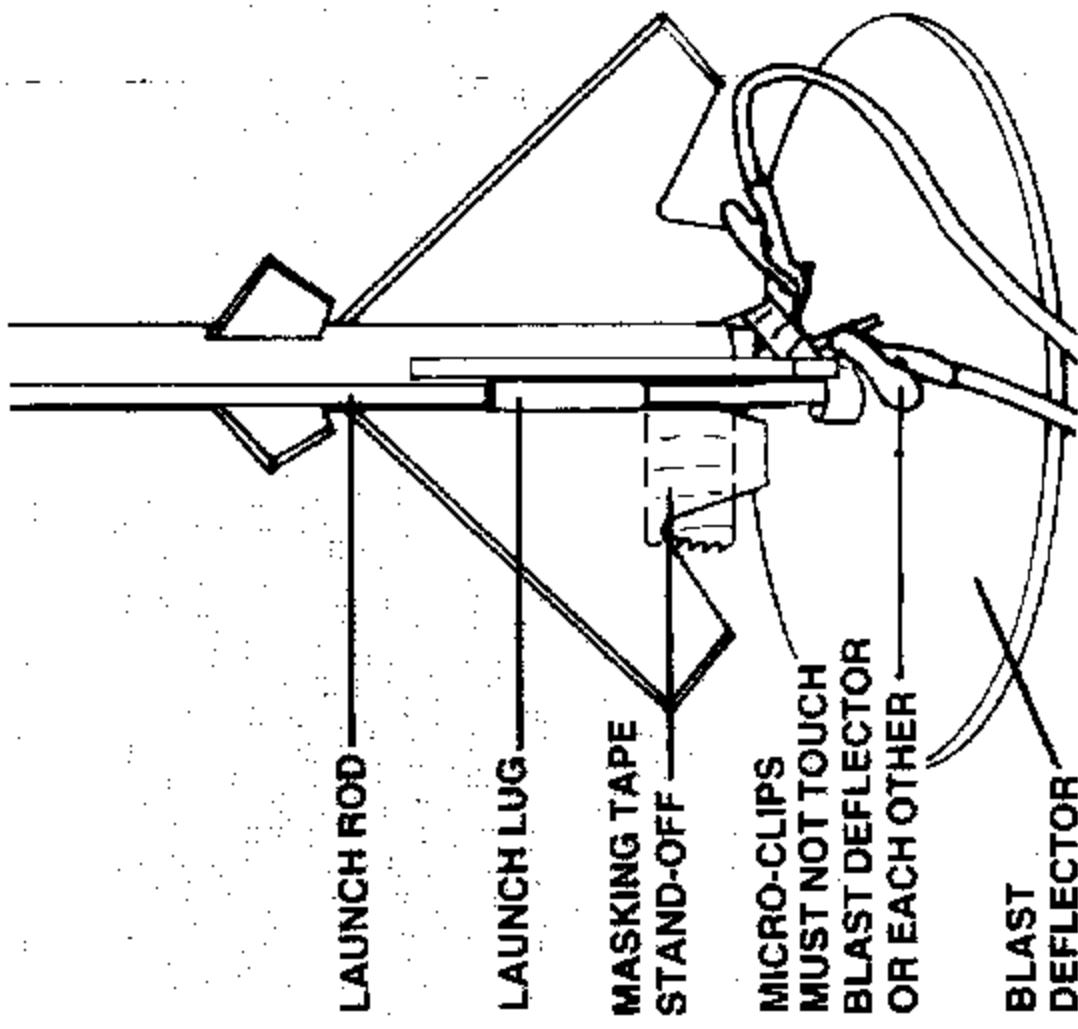


LAUNCH LUG

SHOCK CORD

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.

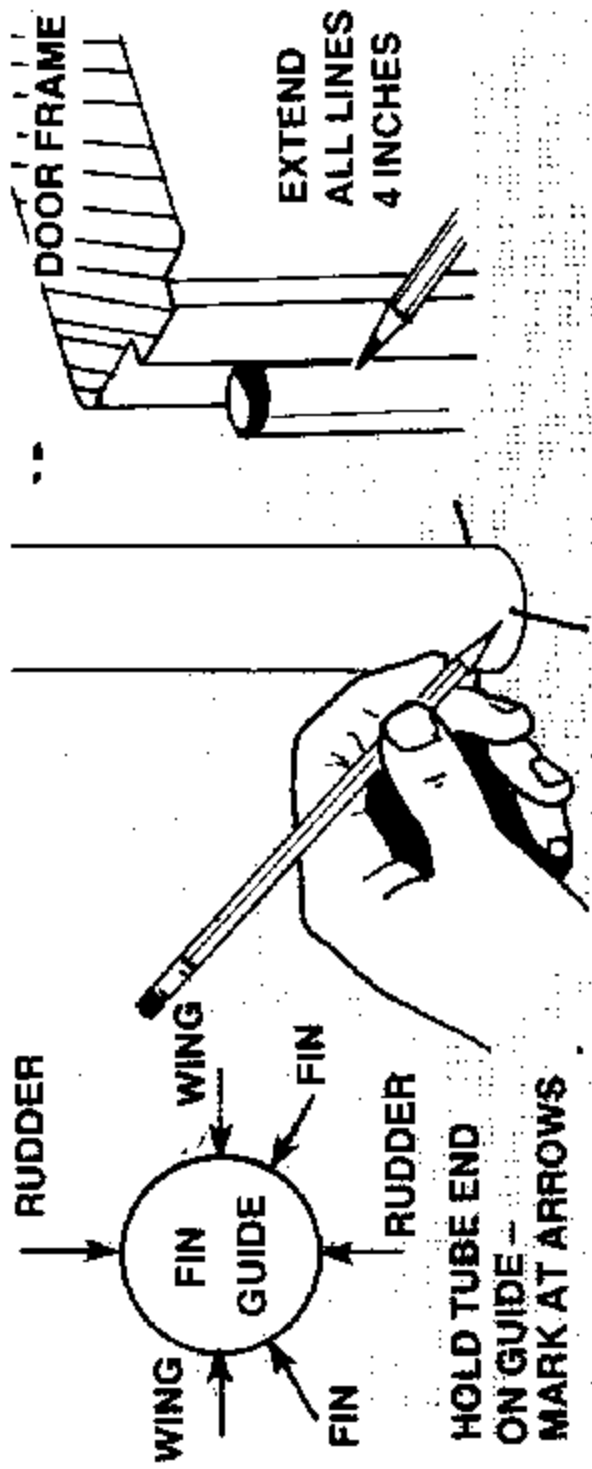


LAUNCH!!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

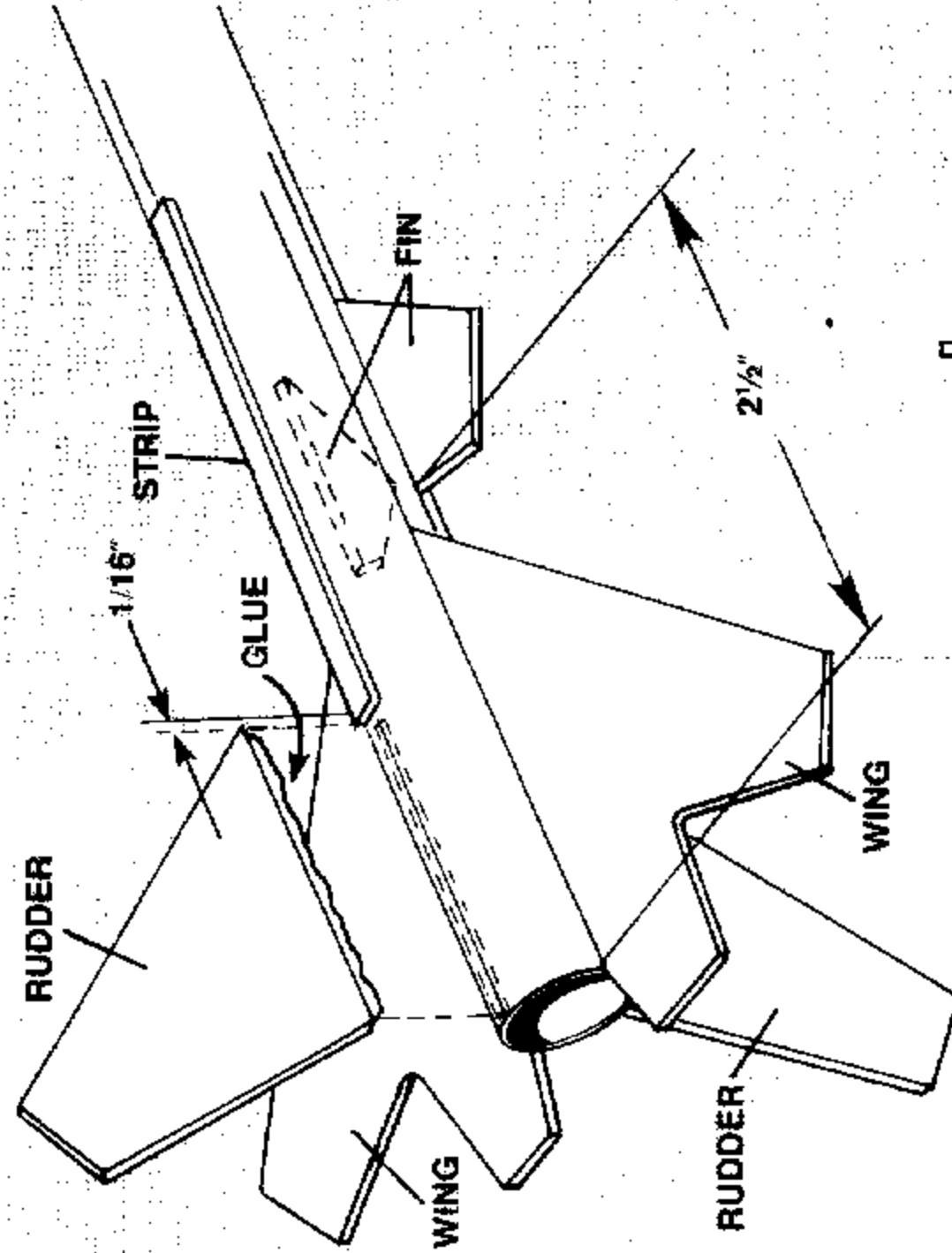
Remove safety key—Replace cap on rod.



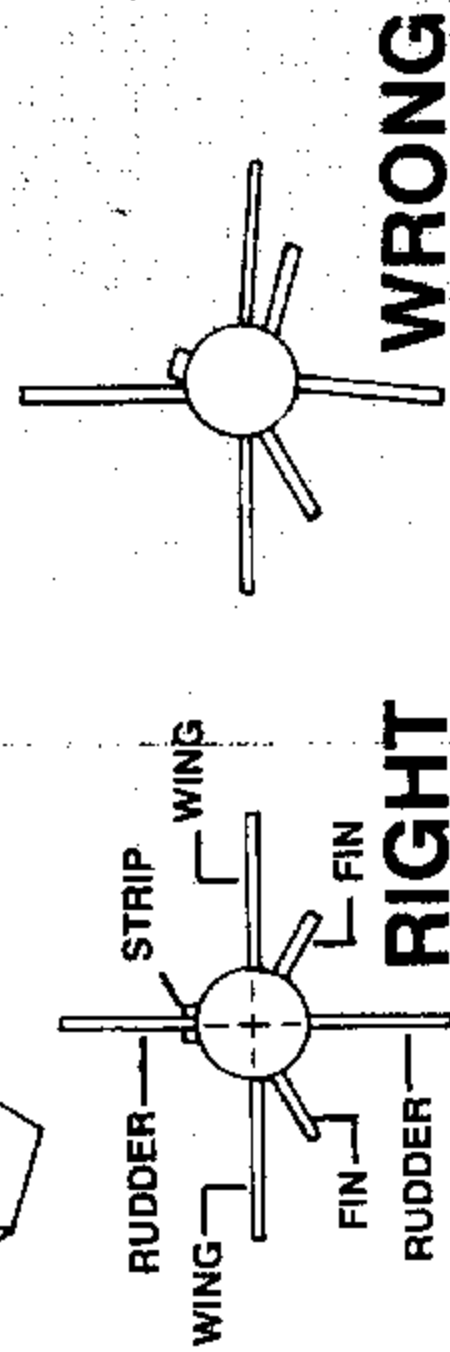
- 1 A. Stand the body tube upright on the fin guide and mark all the fin positions.
- B. Find a groove such as a door jamb or open drawer.
- C. Extend the marks approximately 4 inches down the length of the body tube.



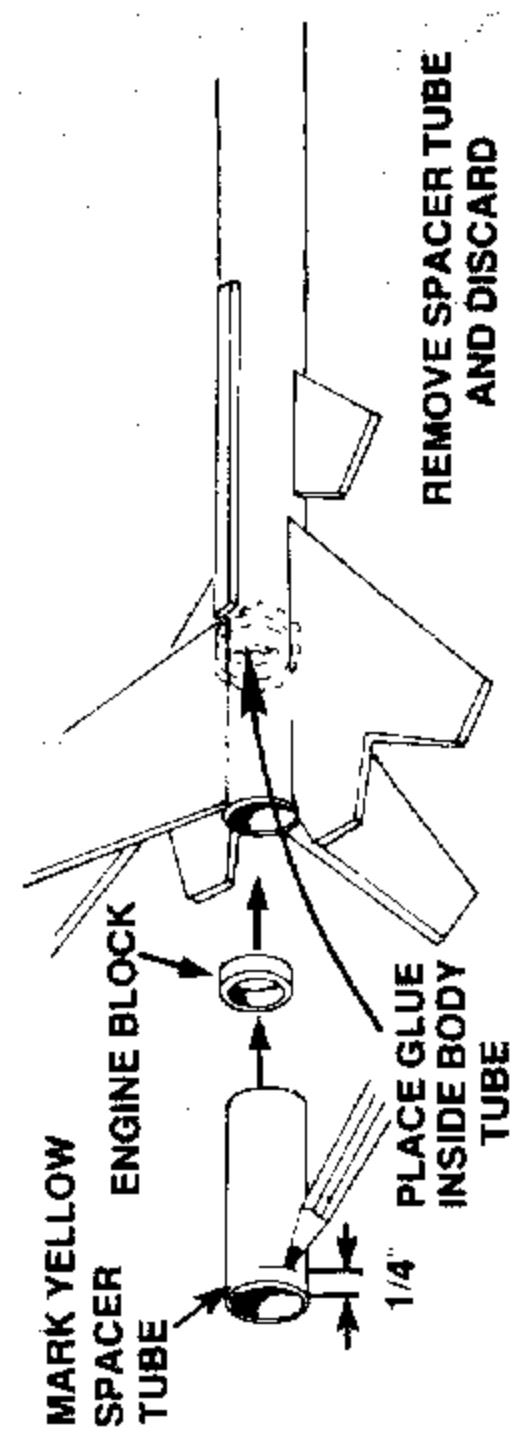
- 2 Glue die-cut parts onto body tube in positions shown.
 - A. Put a small line of white glue along the correct edge of a die-cut part and place on body tube pencil line.
 - B. REMOVE, allow 15 seconds for glue to become tacky.
 - C. Add a bit more glue and reposition die-cut part.
 - D. Repeat with remainder of die-cut parts.



- 3 Make sure the parts are positioned as straight as possible. If they are crooked, remove them and try fitting them again. Use the fin guide to aid in checking alignment.



- 4 A. Mark spacer tube 1/4 inch from one end.
- B. Place a ring of glue on the inside of the body tube about 1 1/2 inches from the rear of the rocket.
- C. Insert engine block into end of tube.
- D. Use the spacer tube to push engine block into the tube until mark is even with end of tube.
- E. Remove spacer tube quickly before glue sets and discard it.



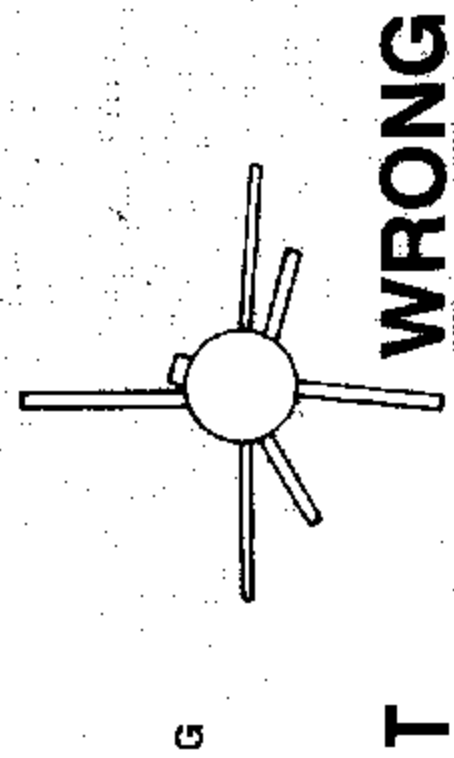
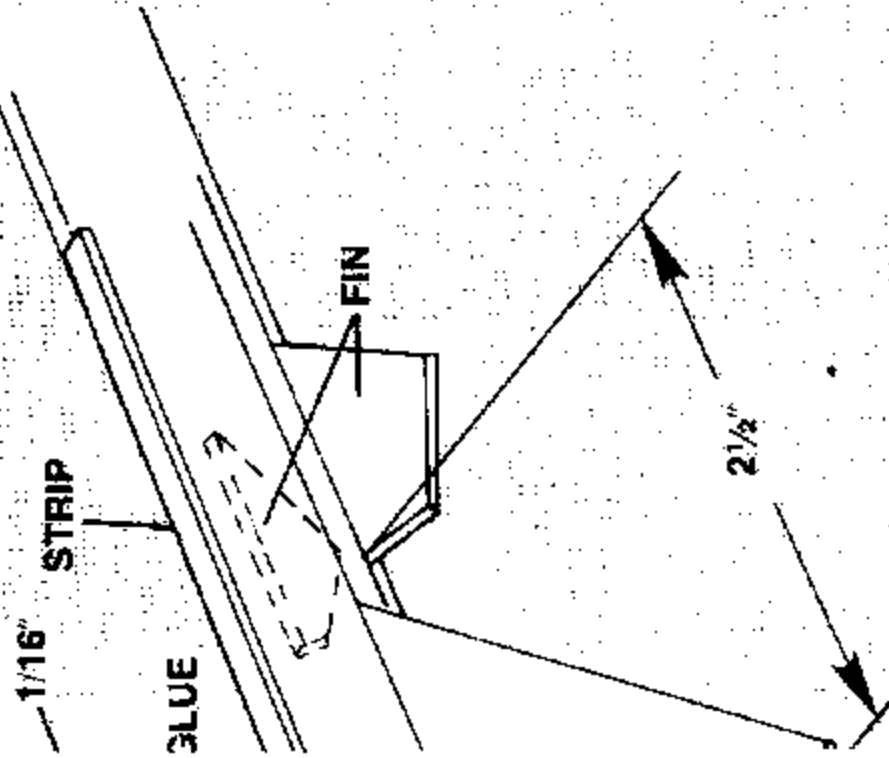
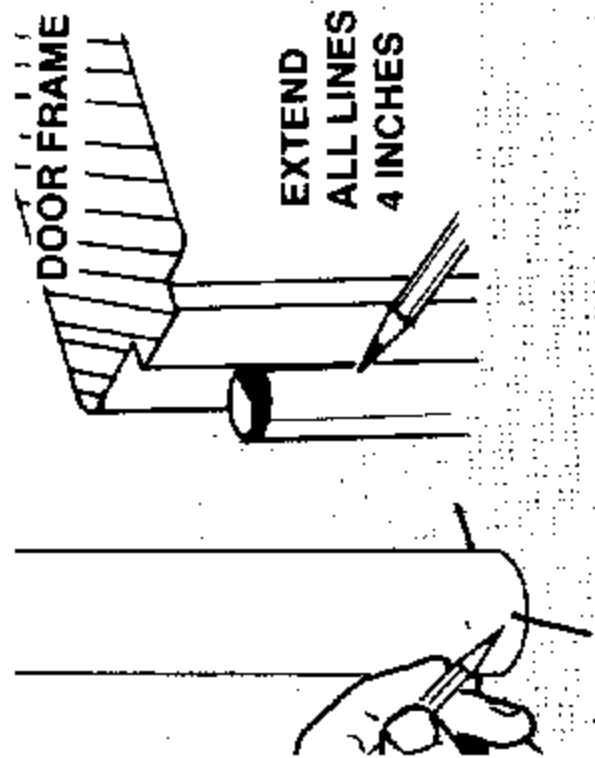
- 5 A. Set a tube coupler in position, without glue against the wing-body tube joint.
- B. Note where the parts touch.
- C. Remove the coupler, apply glue to it, and reposition in the proper place.
- D. Repeat for the other coupler.
- E. Allow the glue to dry.

- 6 A. Cut two slits in bottom forward end of body tube as shown.
- B. Insert shock cord into rear slot and tie knot in end. Apply glue to knot.
- C. Pull knot back inside tube.
- D. Insert other end of shock cord into forward slot.
- E. Put glue on tube between slits and pull cord taut.

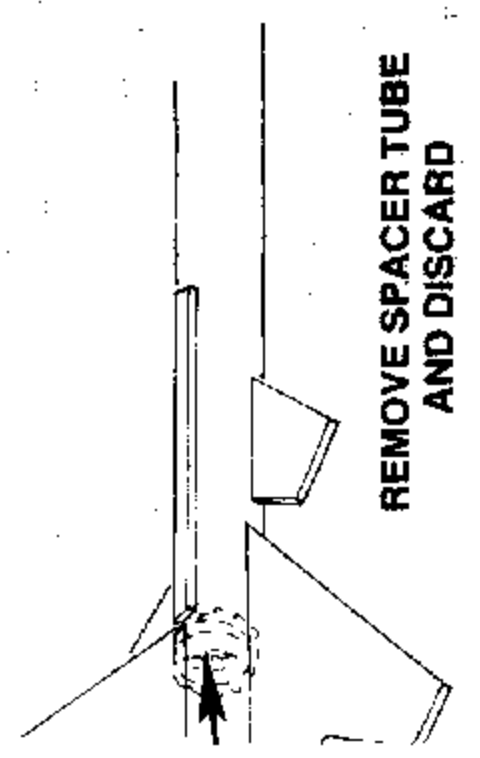
- 7 A. Assemble nose cone and nose cone insert with plastic cement.
- B. When dry, tie free end of shock cord to nose loop with double knot.

- 8 A. Run a line of glue along one side of the launch lug, and place the lug against the bottom rudder/body tube joint.
- B. Smooth out the excess glue.
- C. Now run a small line of glue along both sides of each body tube-fin joint.
- D. Smooth out the excess glue with your fingertips. Allow to dry.

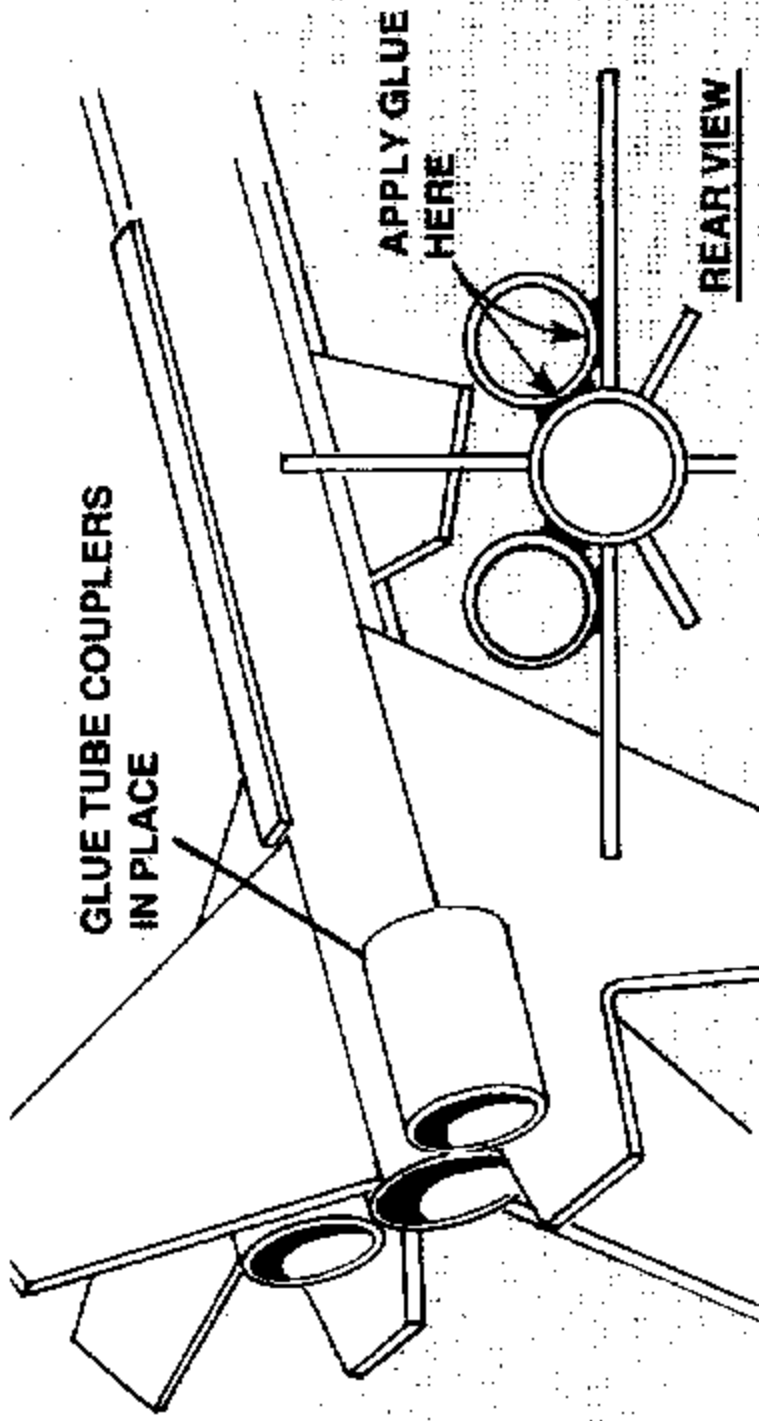
- 9 Paint the rocket gray. Paint nose cone white. After the paint is dry, apply decals. To apply decals, cut each out, dip in lukewarm water for 20 seconds and hold until it uncurls. Refer to photograph on front page and/or on front of panel for decal placement. Slip decal off backing sheet and onto model. Blot away excess water. For best results, let decals dry overnight and apply a coat of clear spray paint to protect decals.



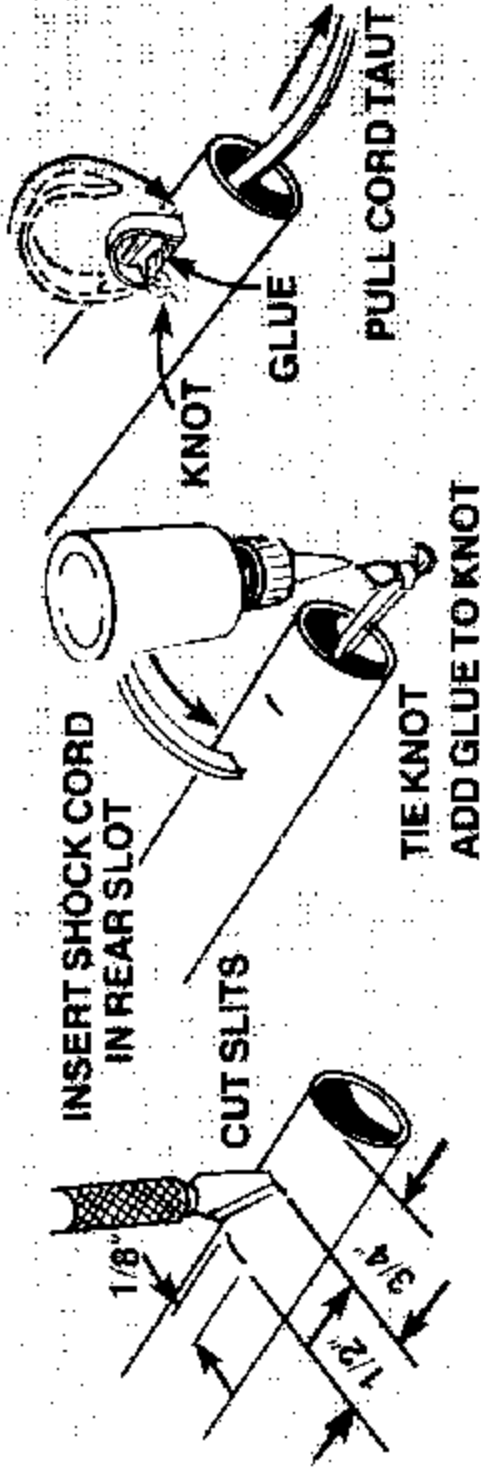
WRONG



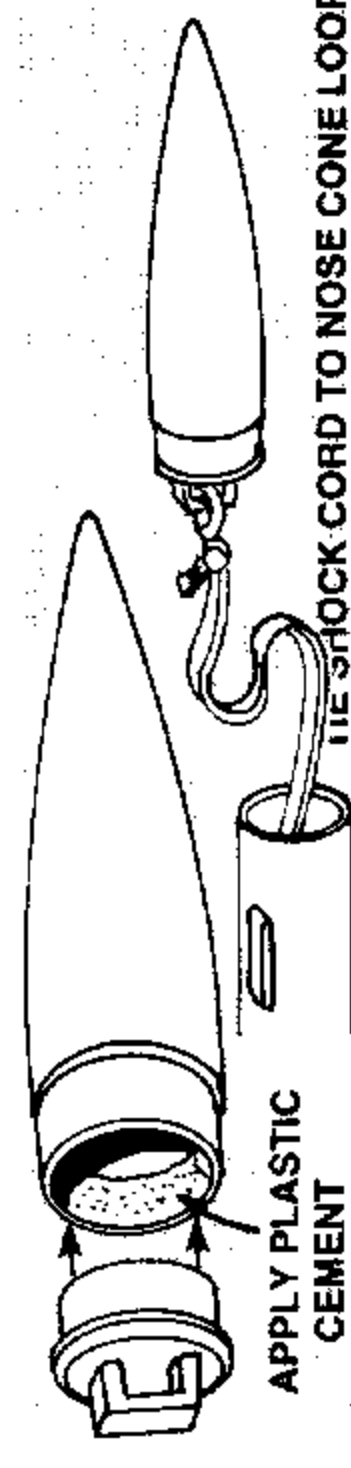
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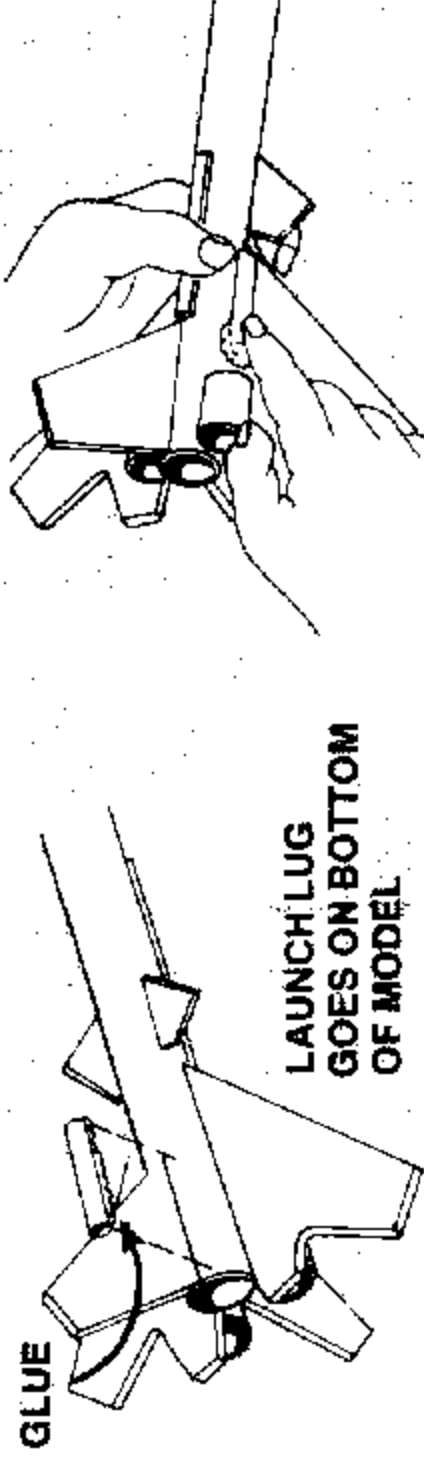
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