

AIM-9 SIDEWINDER™ INSTRUCTIONS

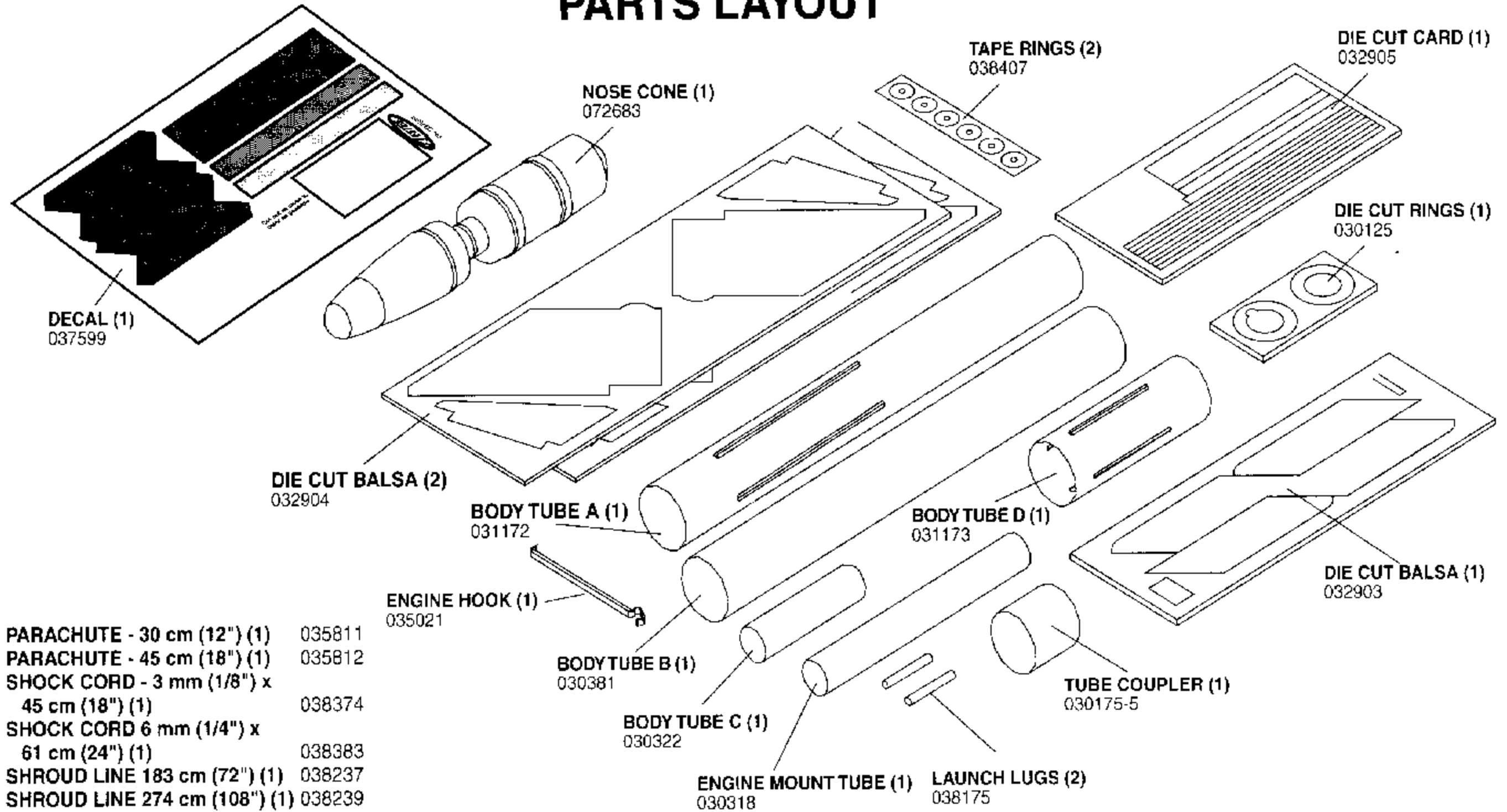


KIT NO. 2125 PN 84461

TOOLS REQUIRED:

- | | | | | | | | | |
|------------------------|----------------|-------------|----------------|--|--|--|-------------|----------|
| | | | | | | | | |
| PENCIL | RULER | HOBBY KNIFE | HOBBY SAW | PAINT BRUSH | MASKING TAPE | 3 mm (1/8") DOWEL | WAXED PAPER | SCISSORS |
| | | | | | | | | |
| GLUE (white or yellow) | PLASTIC CEMENT | SANDPAPER | SANDING SEALER | ROCKET BUILDER'S MARKING GUIDE EST 302227 (optional) | BOTTLE PAINT (bright silver, gloss red and copper) | SPRAY PAINT (gloss white and olive drab) | | |

PARTS LAYOUT



4.

A. Slide engine mount assembly into body tube A.

B. Position engine hook between slots of tube.

TUBE ENDS SHOULD BE EVEN

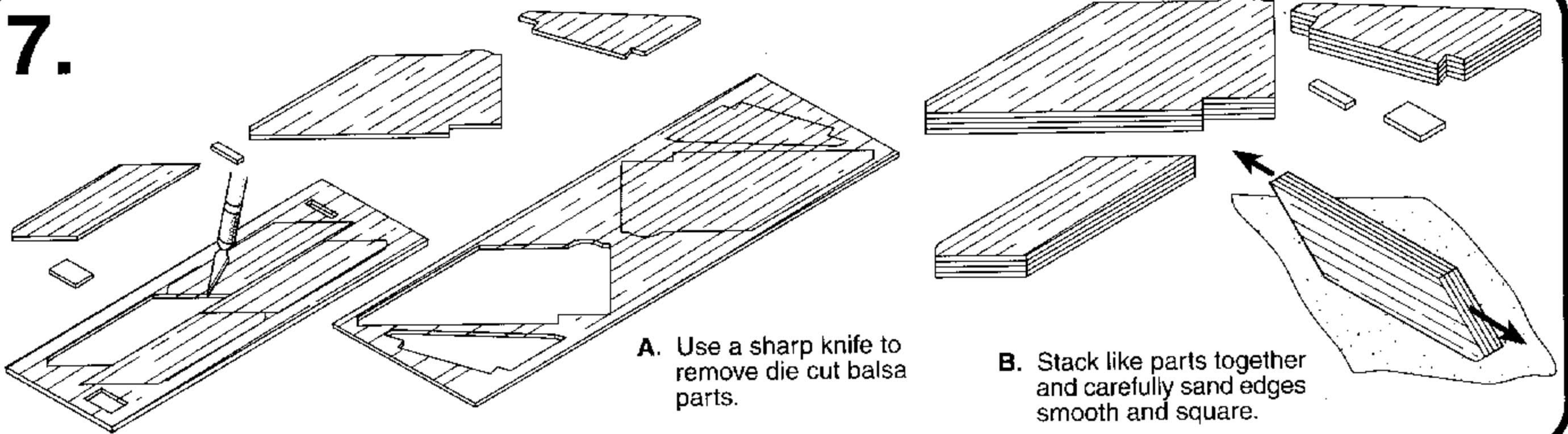
C. Use a long dowel to apply to apply glue where rings touch inside of body tube.

5.

A. Apply glue to inside of body tube B.

B. Jo tub Er mu ev

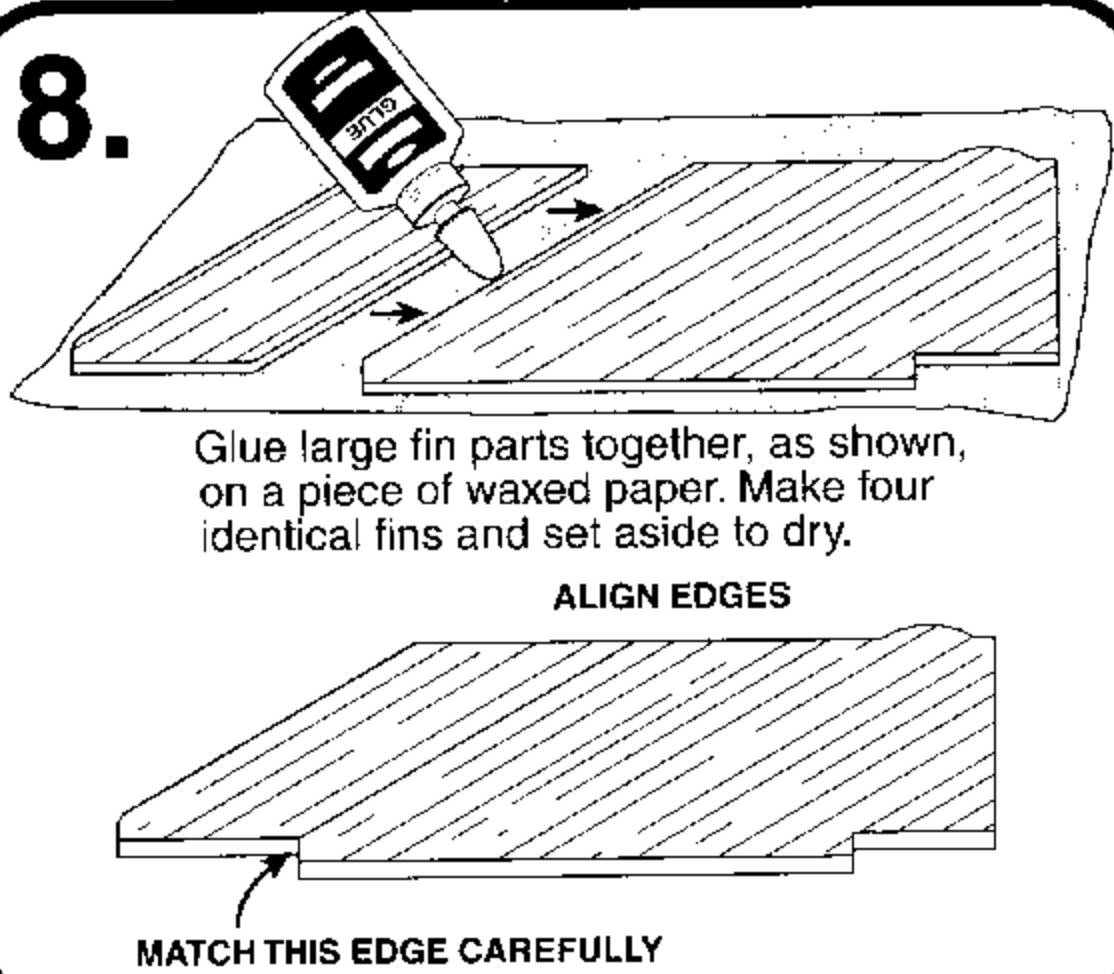
7.



A. Use a sharp knife to remove die cut balsa parts.

B. Stack like parts together and carefully sand edges smooth and square.

8.



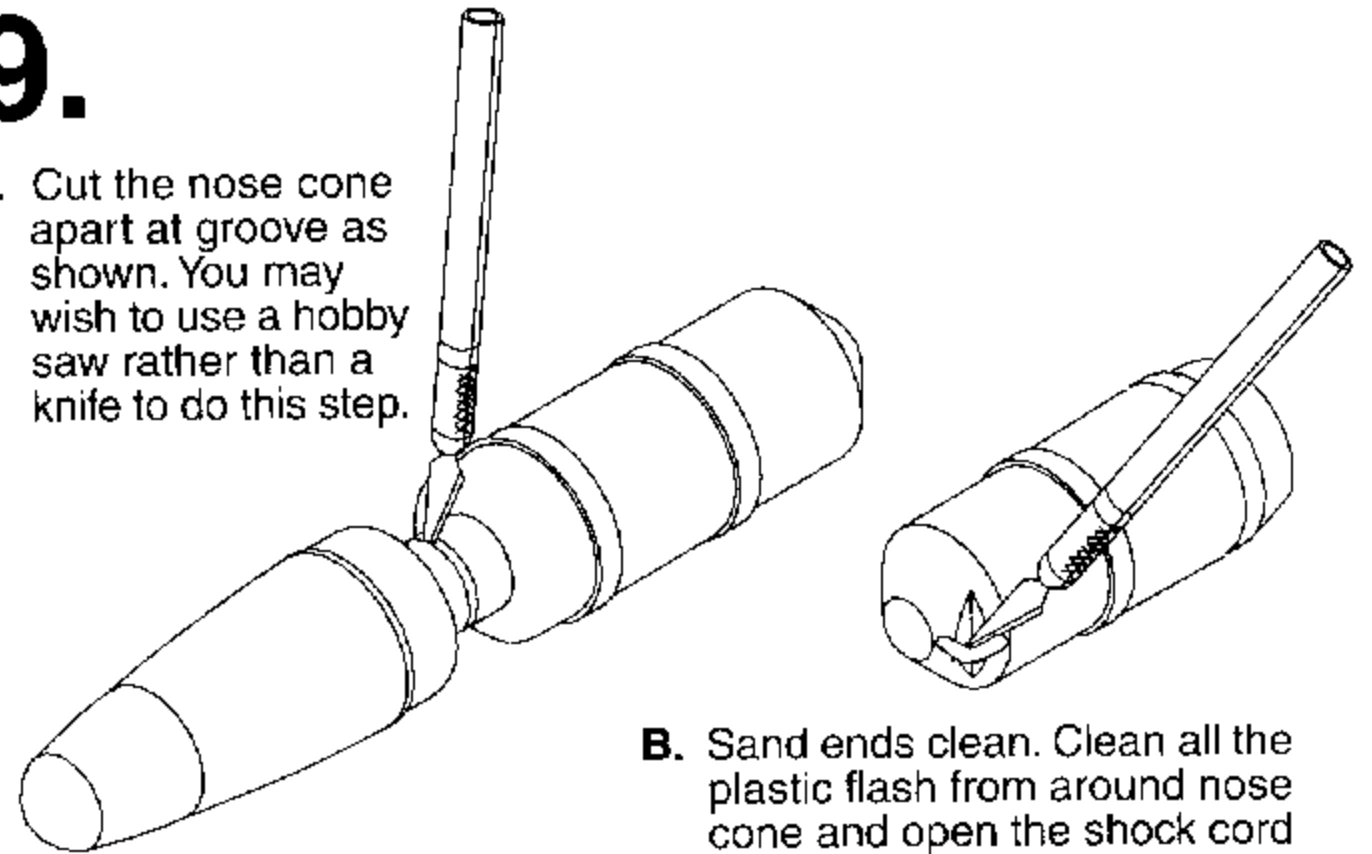
Glue large fin parts together, as shown, on a piece of waxed paper. Make four identical fins and set aside to dry.

ALIGN EDGES

MATCH THIS EDGE CAREFULLY

9.

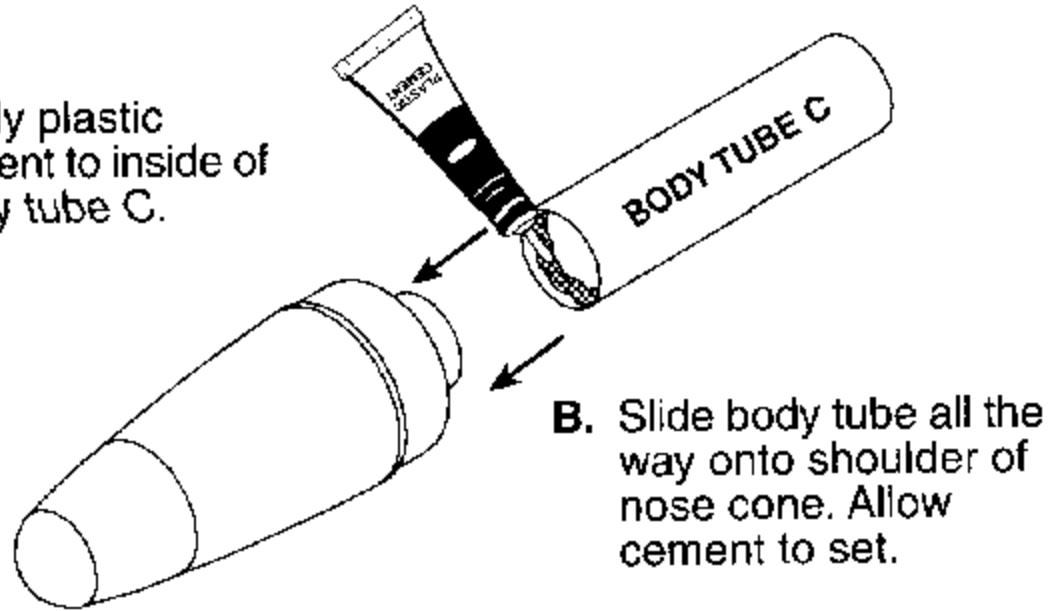
A. Cut the nose cone apart at groove as shown. You may wish to use a hobby saw rather than a knife to do this step.



B. Sand ends clean. Clean all the plastic flash from around nose cone and open the shock cord loop with a sharp knife.

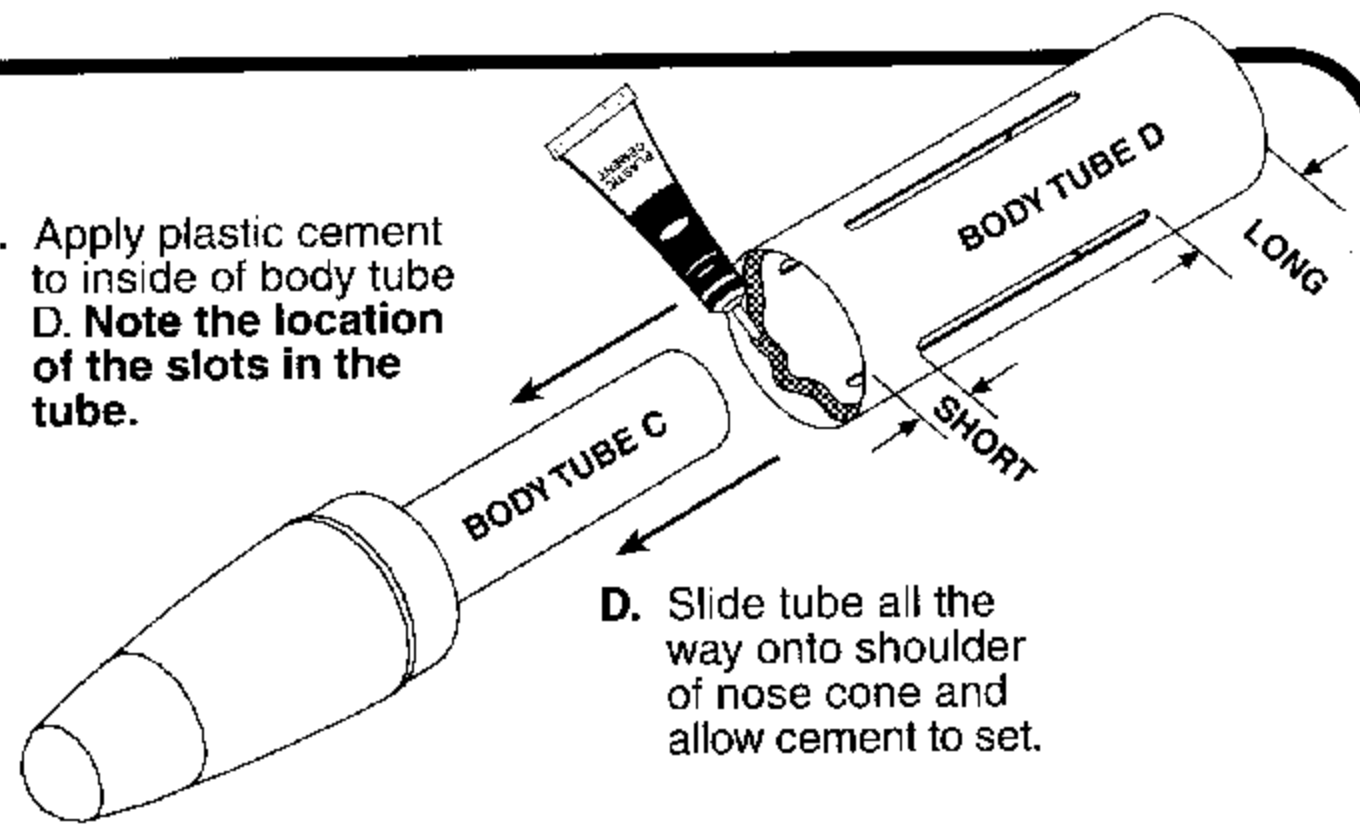
10.

A. Apply plastic cement to inside of body tube C.



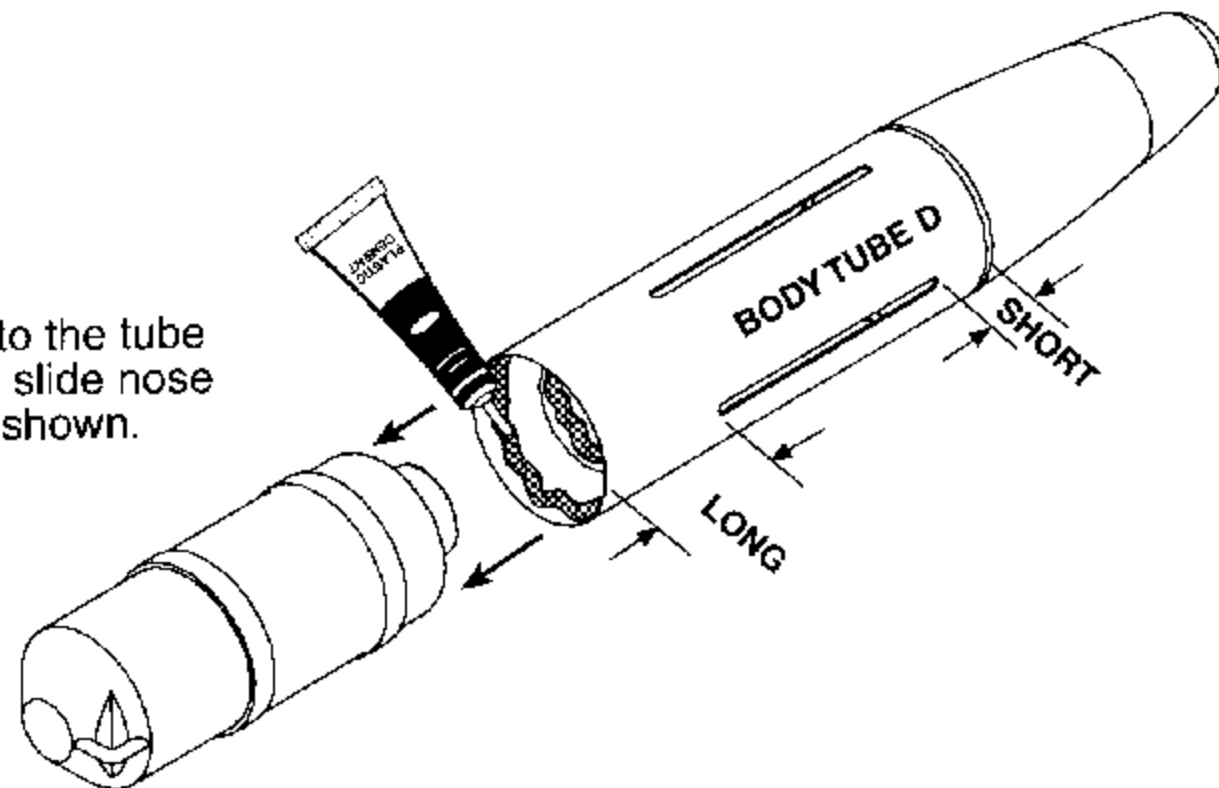
B. Slide body tube all the way onto shoulder of nose cone. Allow cement to set.

C. Apply plastic cement to inside of body tube D. Note the location of the slots in the tube.

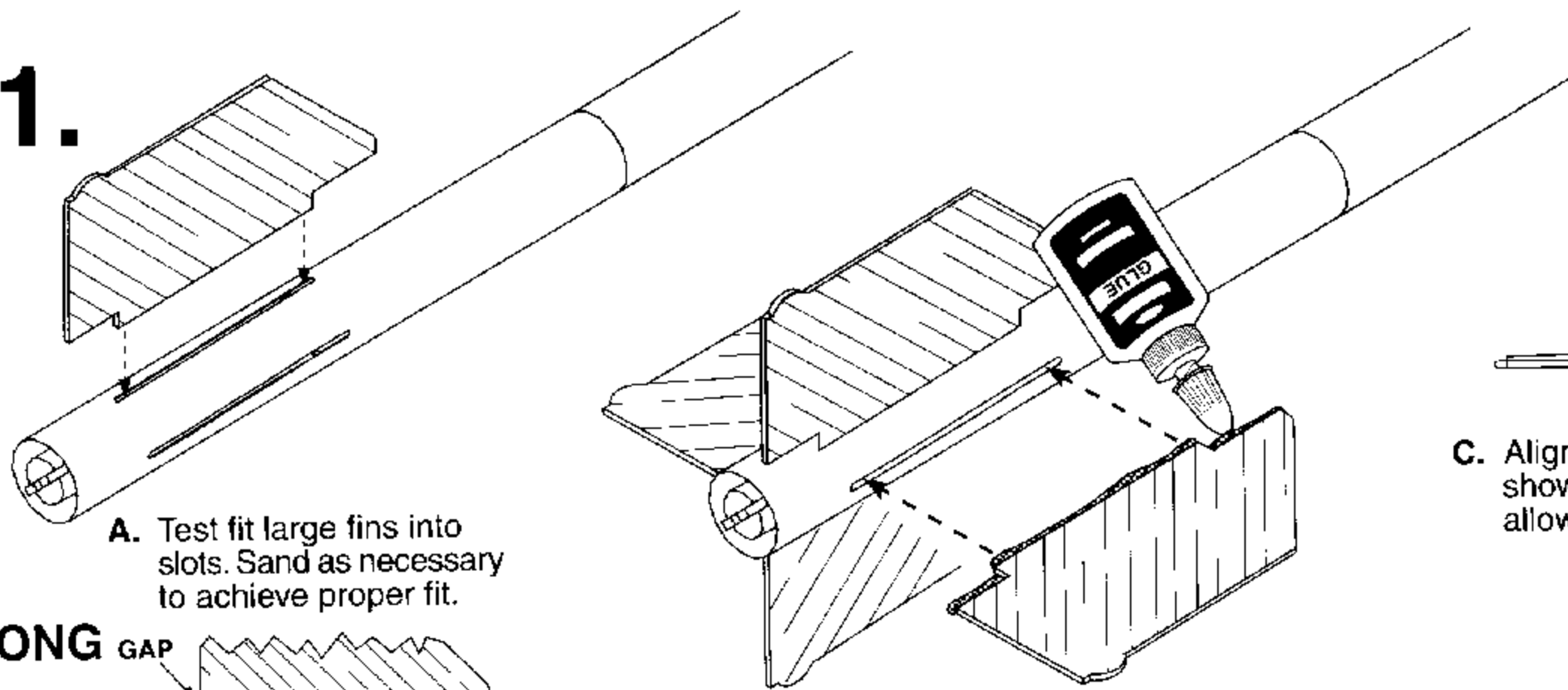


D. Slide tube all the way onto shoulder of nose cone and allow cement to set.

E. Apply plastic cement into the tube ends C & D, orient, and slide nose cone end into tubes as shown.

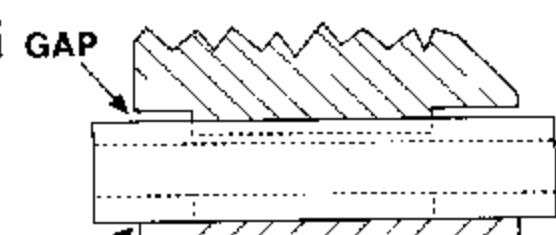


11.

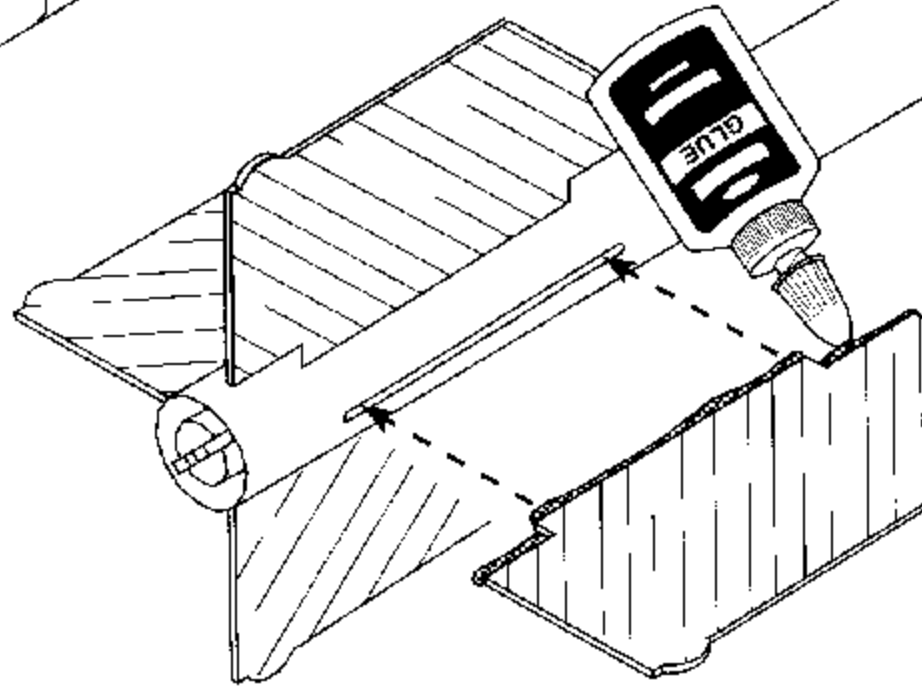
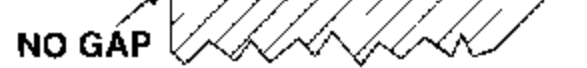


A. Test fit large fins into slots. Sand as necessary to achieve proper fit.

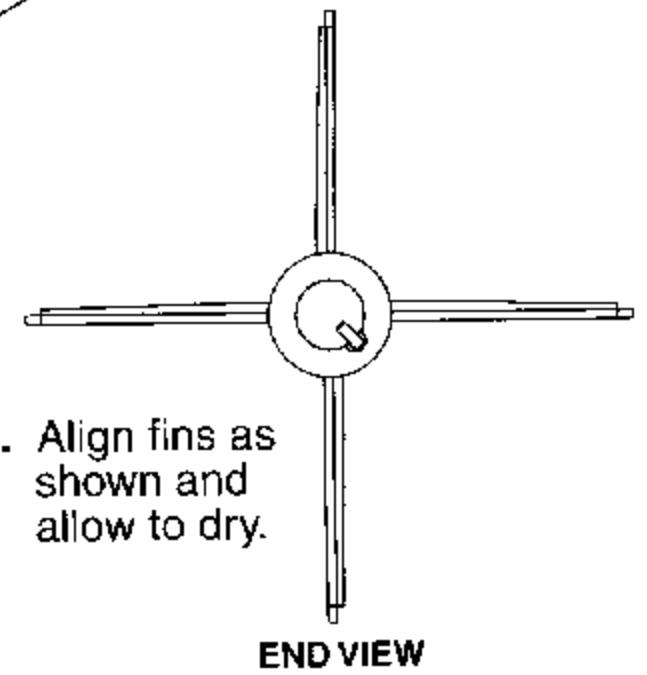
WRONG



RIGHT



B. Apply glue to end of fins as shown and slide into slots of tube.

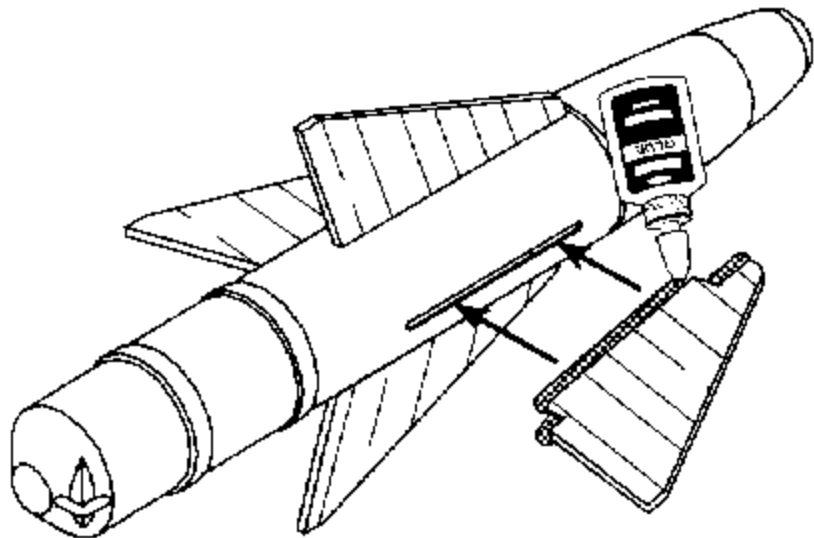


C. Align fins as shown and allow to dry.

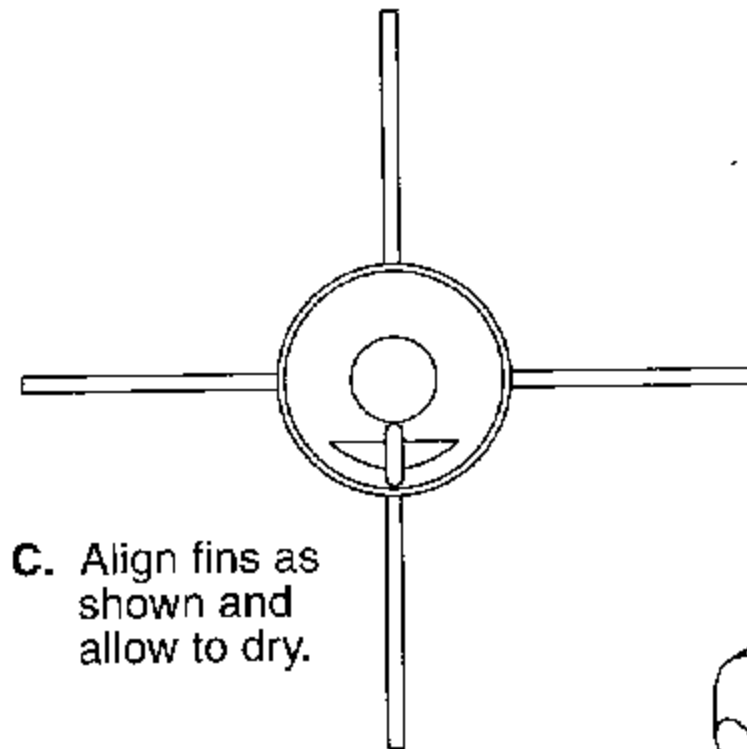
NOTE: Slots on body tube are intentionally angled.

12.

A. Test fit the small fins in nose section. Sand as required for proper fit.

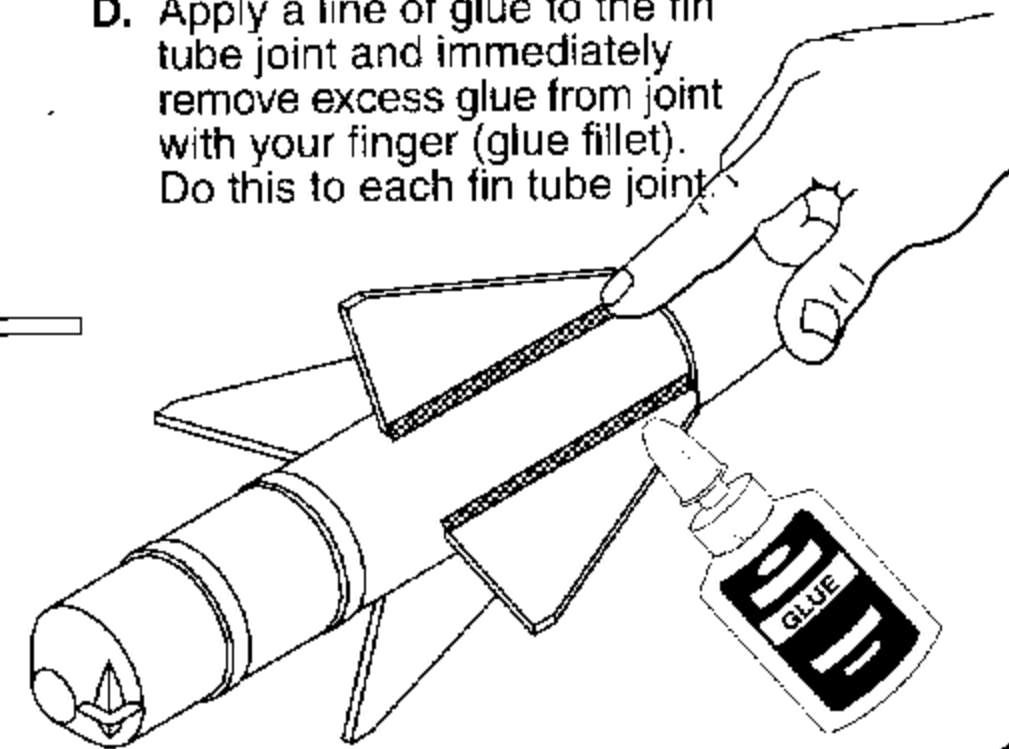


B. Apply glue to ends of fins and slide into place.



C. Align fins as shown and allow to dry.

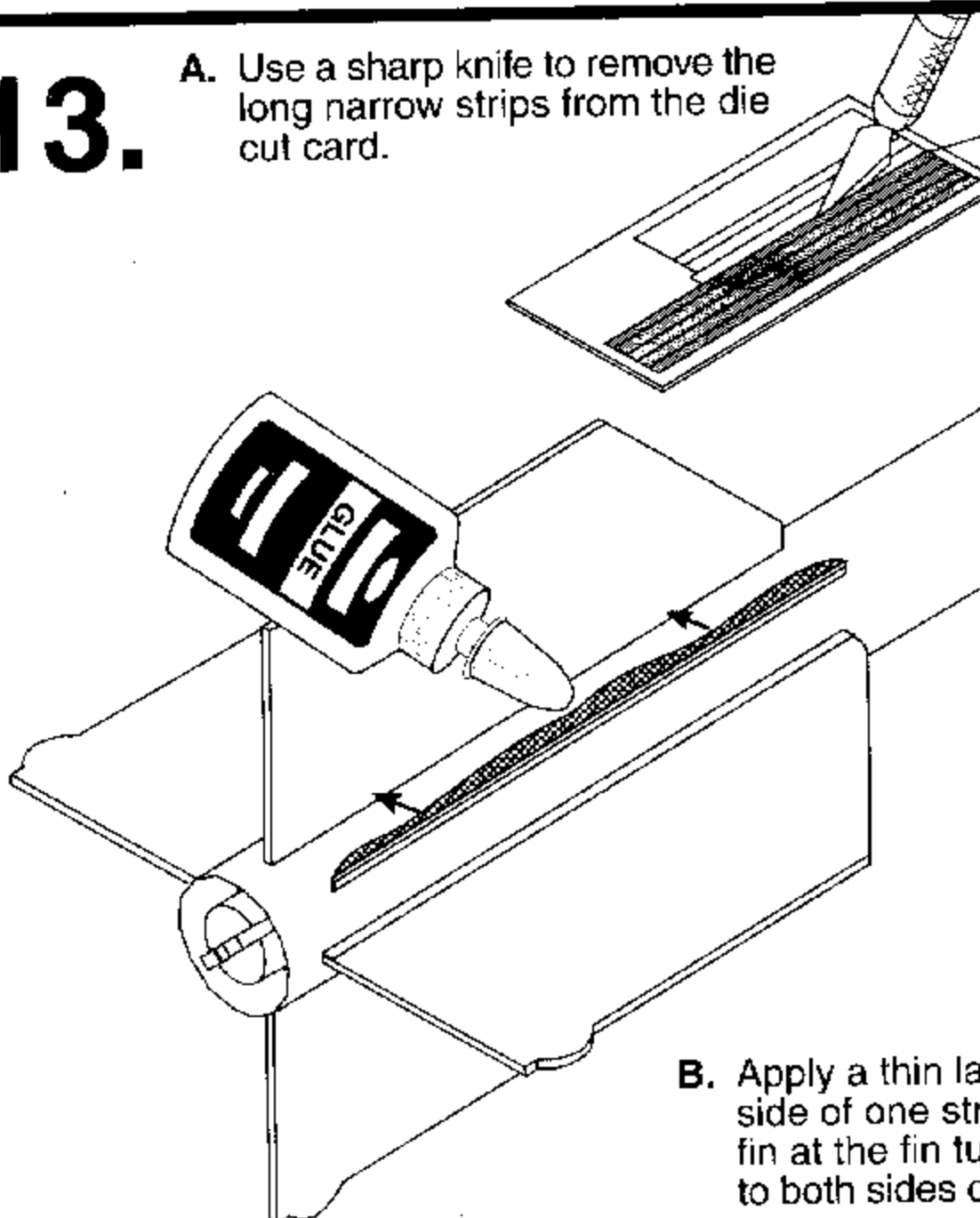
D. Apply a line of glue to the fin tube joint and immediately remove excess glue from joint with your finger (glue fillet). Do this to each fin tube joint.



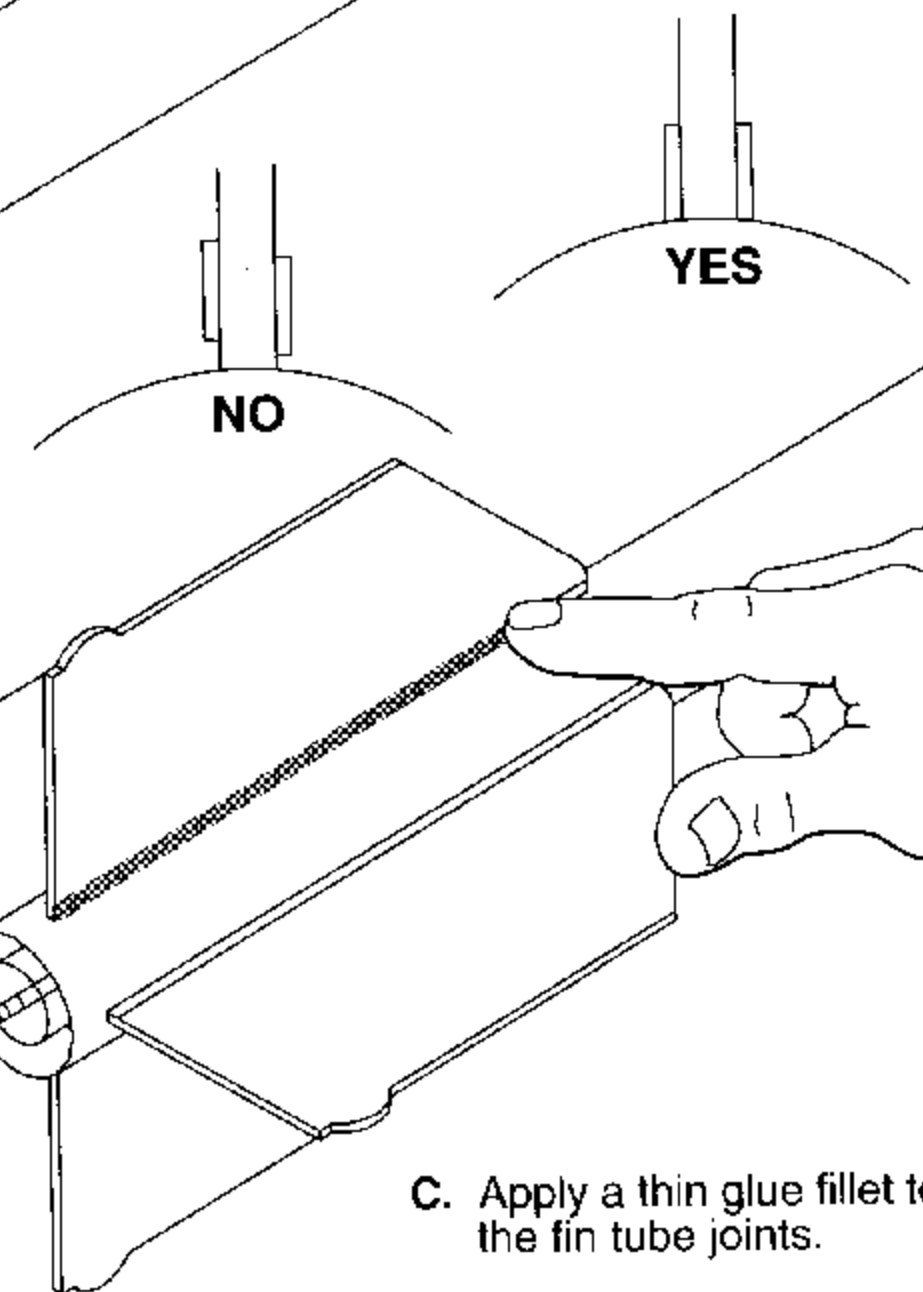
13.

A. Use a sharp knife to remove the long narrow strips from the die cut card.

USE THESE STRIPS FOR THIS STEP



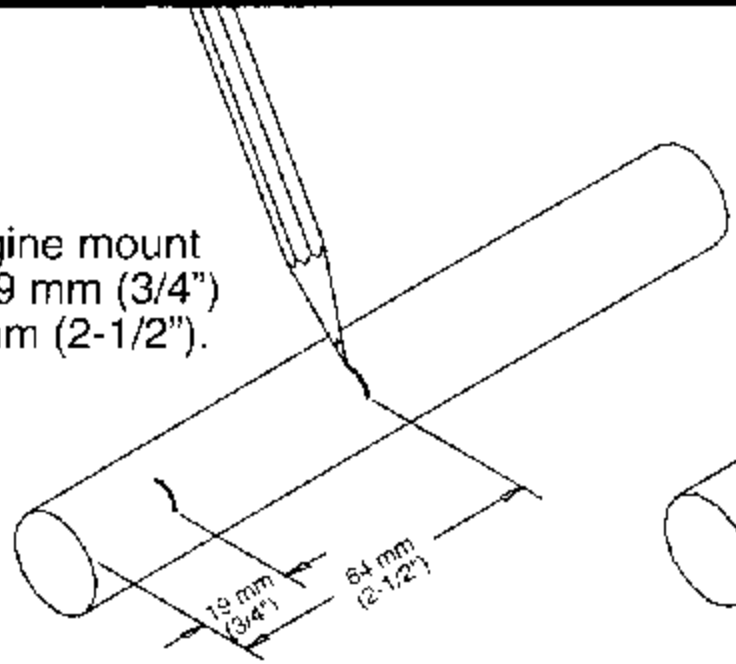
B. Apply a thin layer of glue to back side of one strip and position onto fin at the fin tube joint. Apply strips to both sides of each of the four fins.



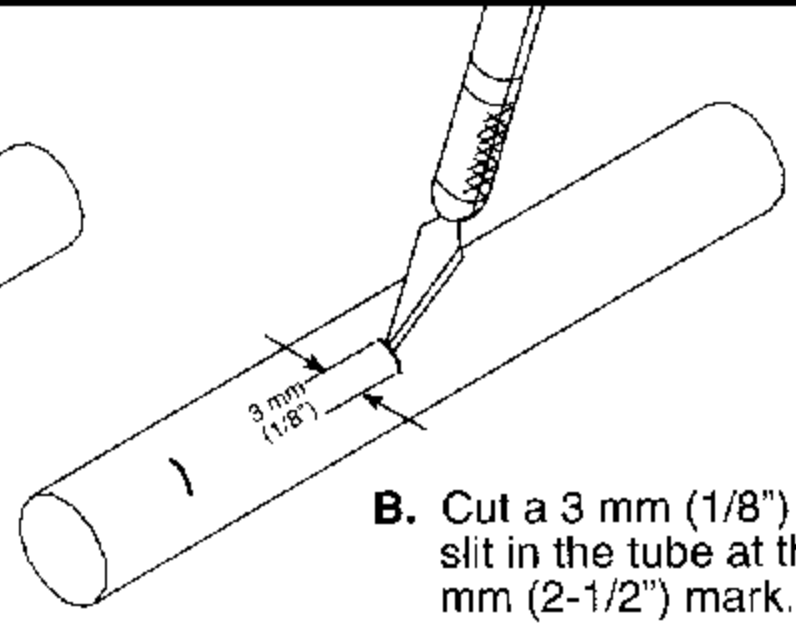
C. Apply a thin glue fillet to the fin tube joints.

1.

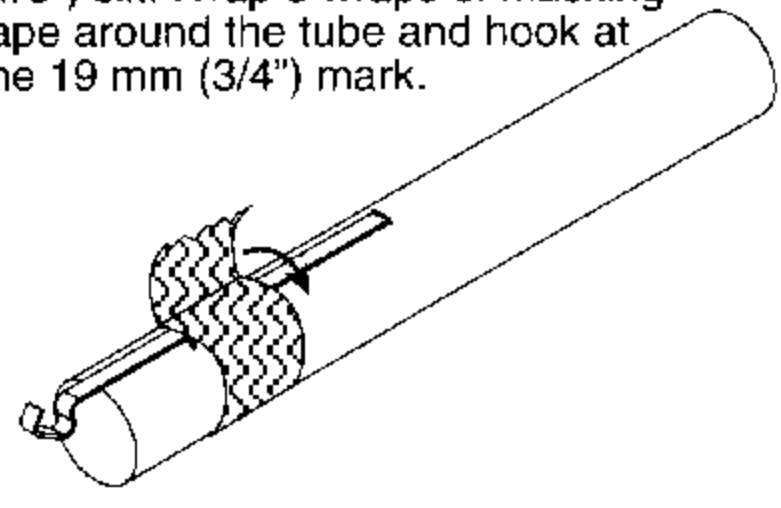
A. Mark engine mount tube at 19 mm (3/4") and 64 mm (2-1/2").



B. Cut a 3 mm (1/8") long slit in the tube at the 64 mm (2-1/2") mark.

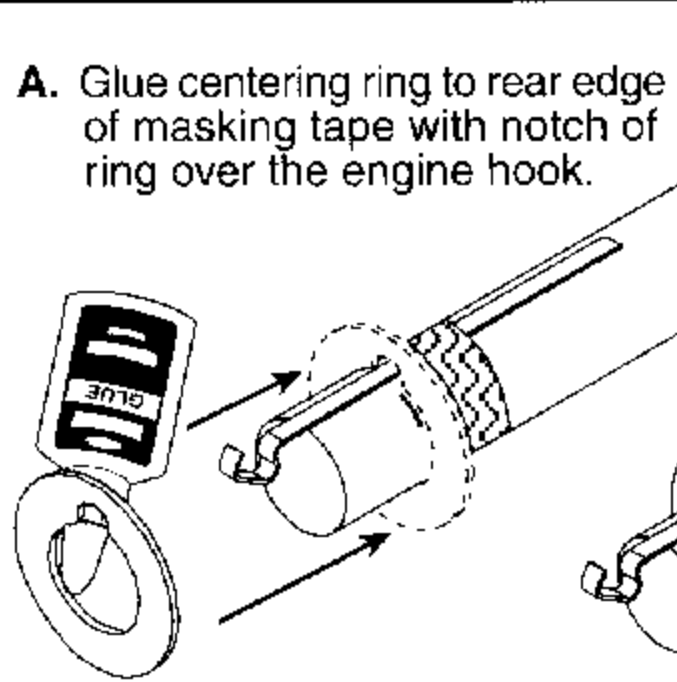


C. Push engine hook into the 3 mm (1/8") slit. Wrap 3 wraps of masking tape around the tube and hook at the 19 mm (3/4") mark.

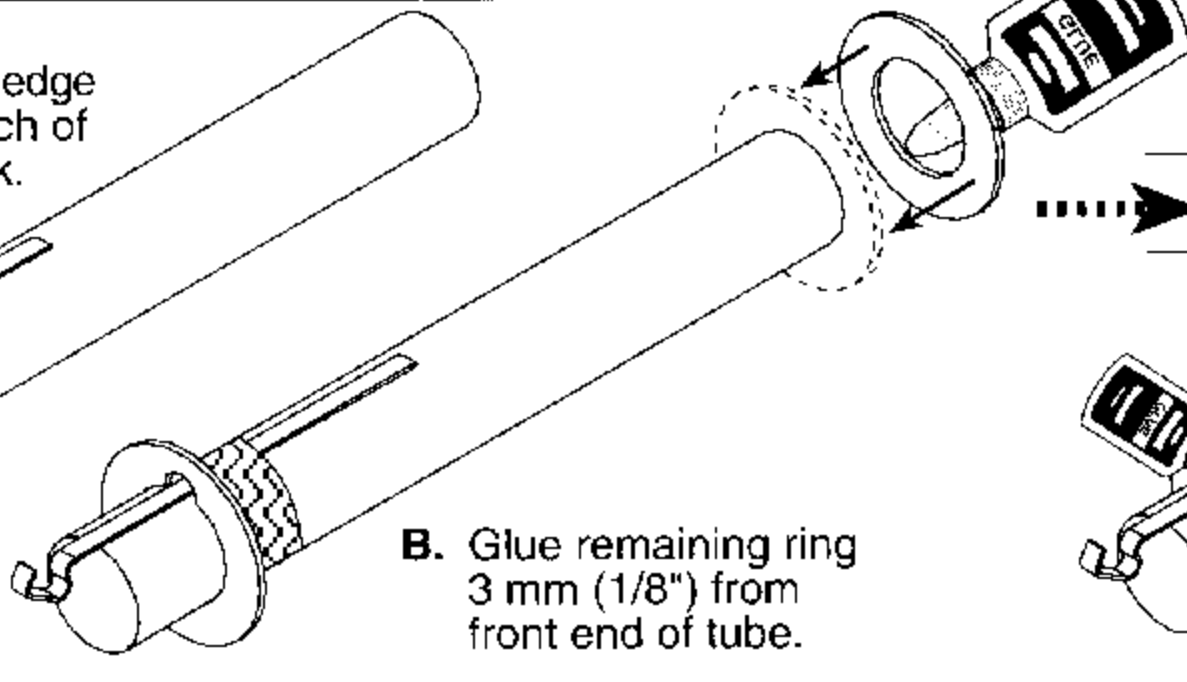


2.

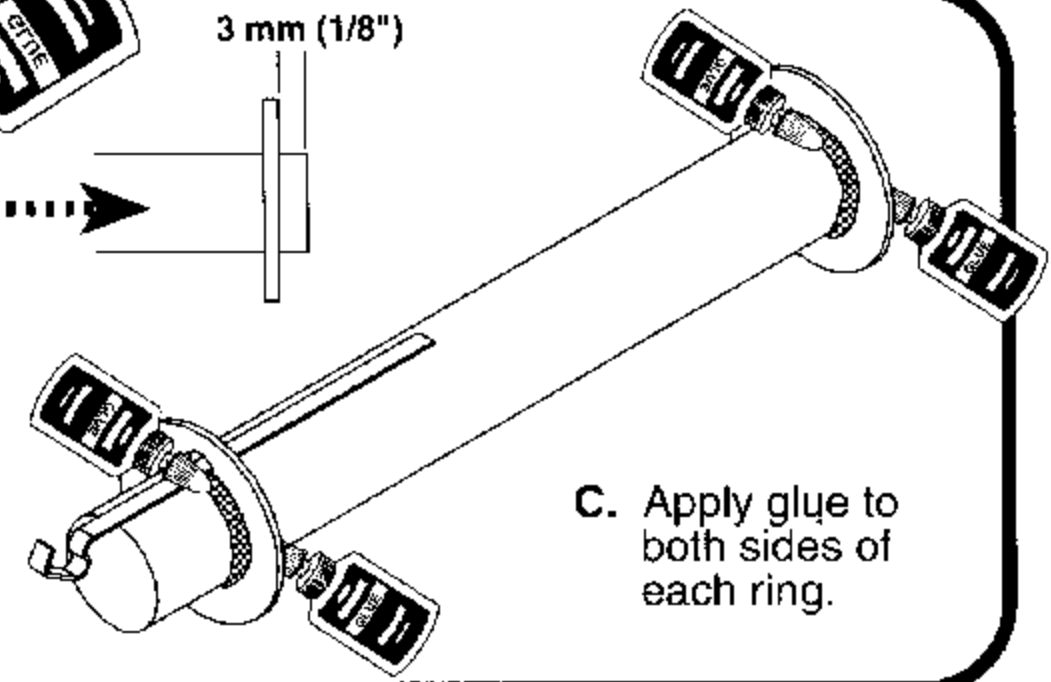
A. Glue centering ring to rear edge of masking tape with notch of ring over the engine hook.



B. Glue remaining ring 3 mm (1/8") from front end of tube.

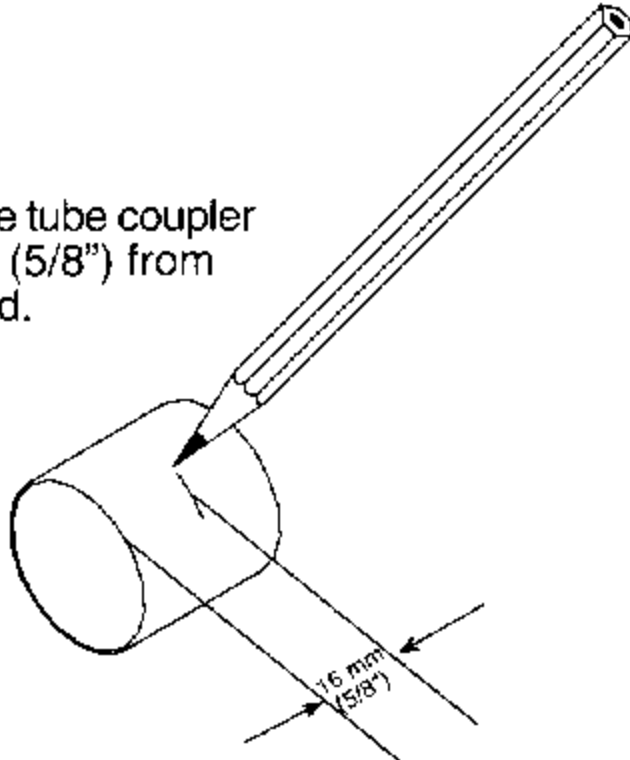


C. Apply glue to both sides of each ring.

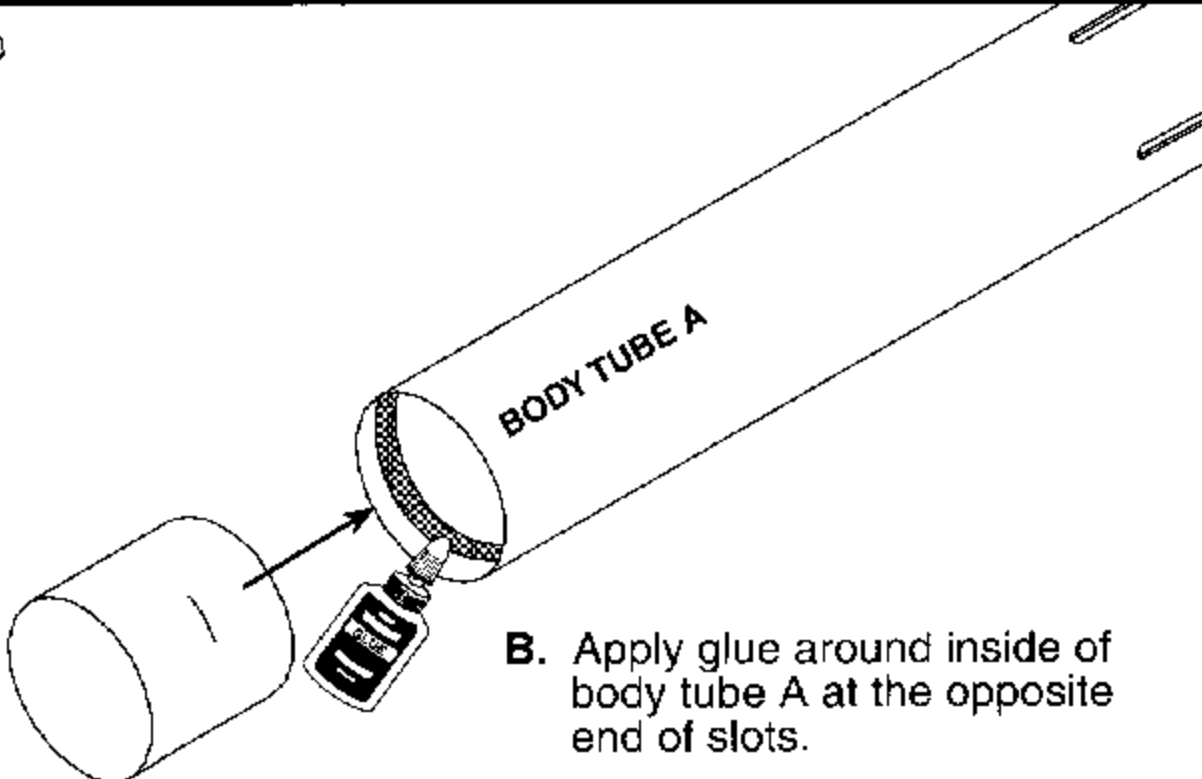


3.

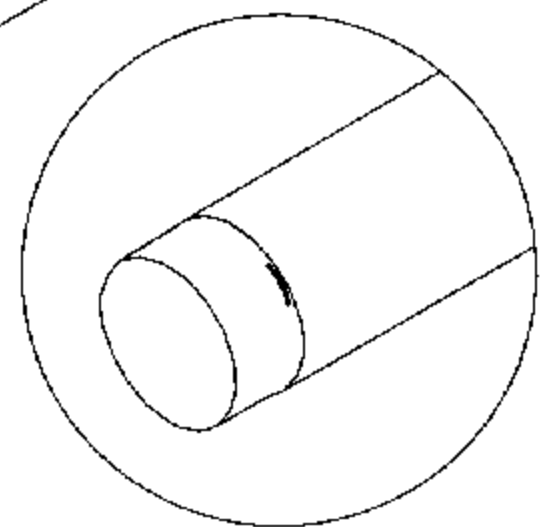
A. Mark the tube coupler 16 mm (5/8") from one end.



B. Apply glue around inside of body tube A at the opposite end of slots.



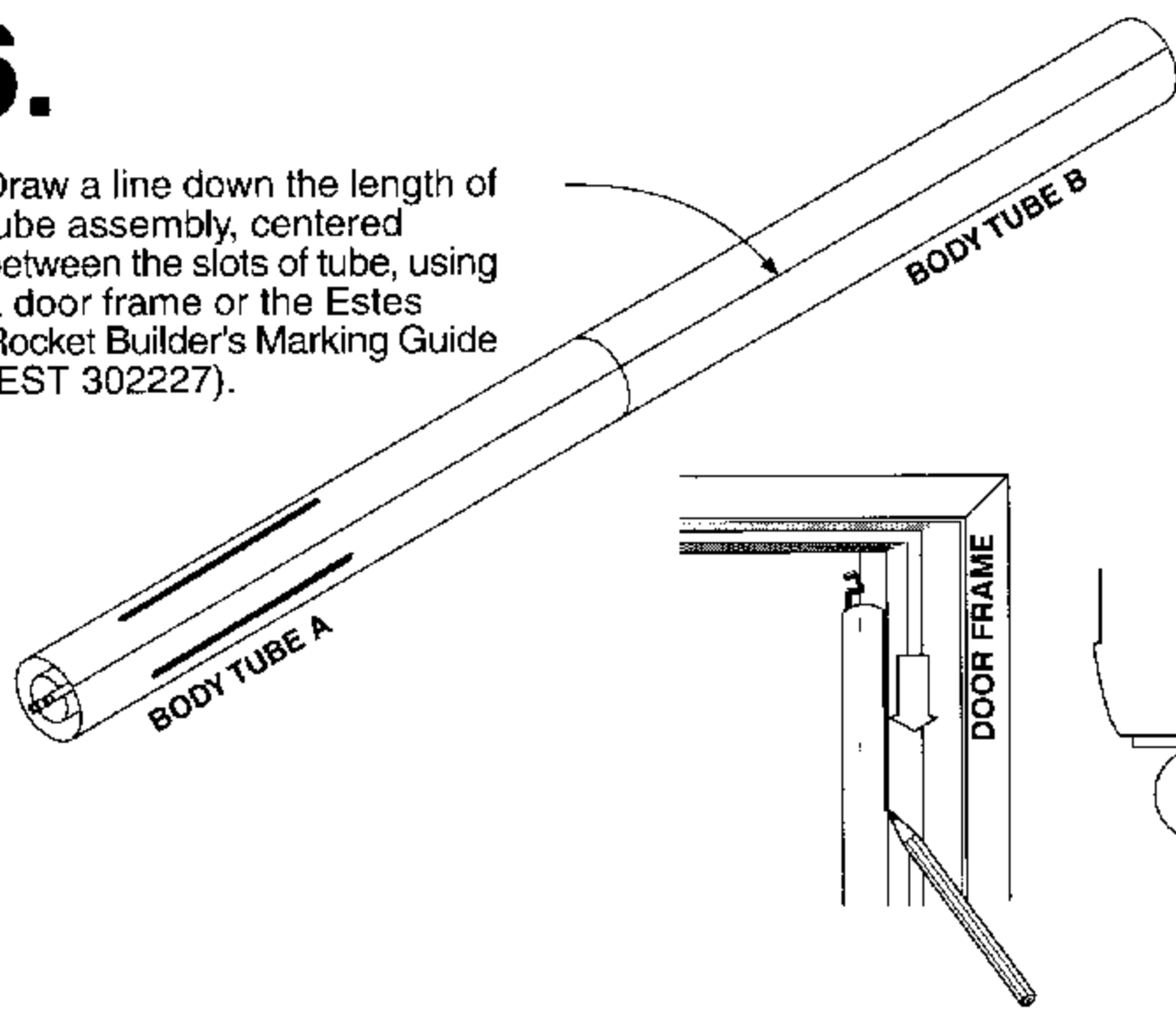
C. Push tube coupler into end of tube up to mark.



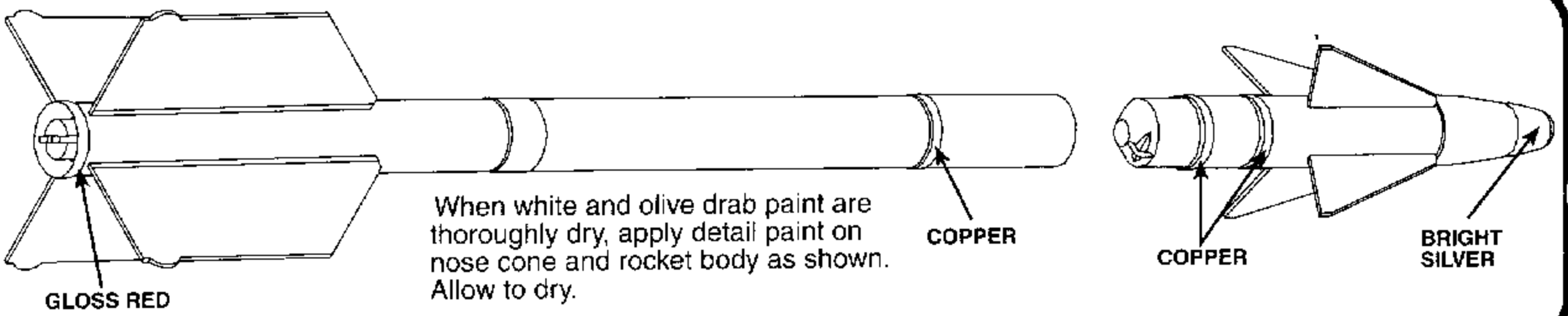
Two tubes, labeled 'BODY TUBE B' and 'BODY TUBE A', are shown being aligned together. A dashed line indicates the intended straight alignment. The word 'YES' is written above the tubes and 'NO' is written below them. A small text block on the left says 'and slide together. of tubes meet only.' Below the diagram, the text reads 'C. Check for straight alignment of tubes.'

6.

Draw a line down the length of tube assembly, centered between the slots of tube, using a door frame or the Estes Rocket Builder's Marking Guide (EST 30227).



18.

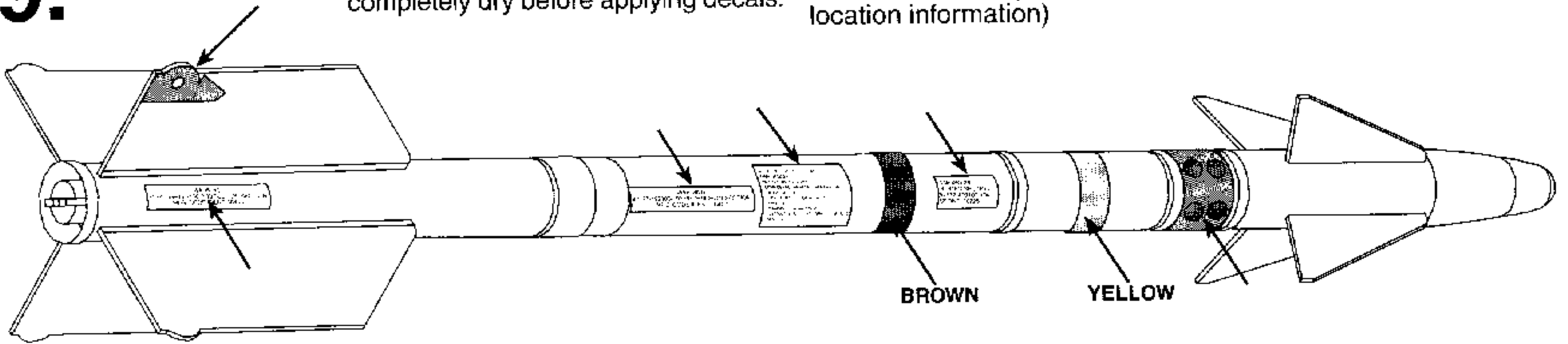


When white and olive drab paint are thoroughly dry, apply detail paint on nose cone and rocket body as shown. Allow to dry.

19.

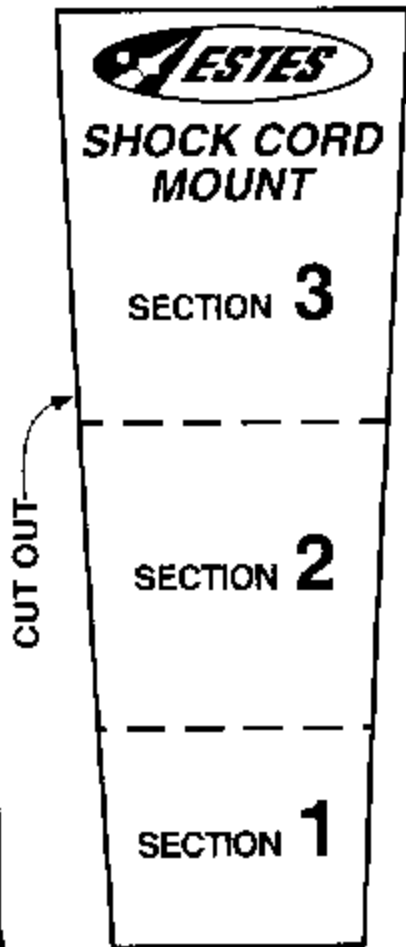
NOTE: Always wait until all paint is completely dry before applying decals.

Cut decals apart on dotted lines. Apply decals in locations shown. (Refer to the box art for additional location information)



20.

A. Cut out shock cord mount. Crease on dotted lines by folding.



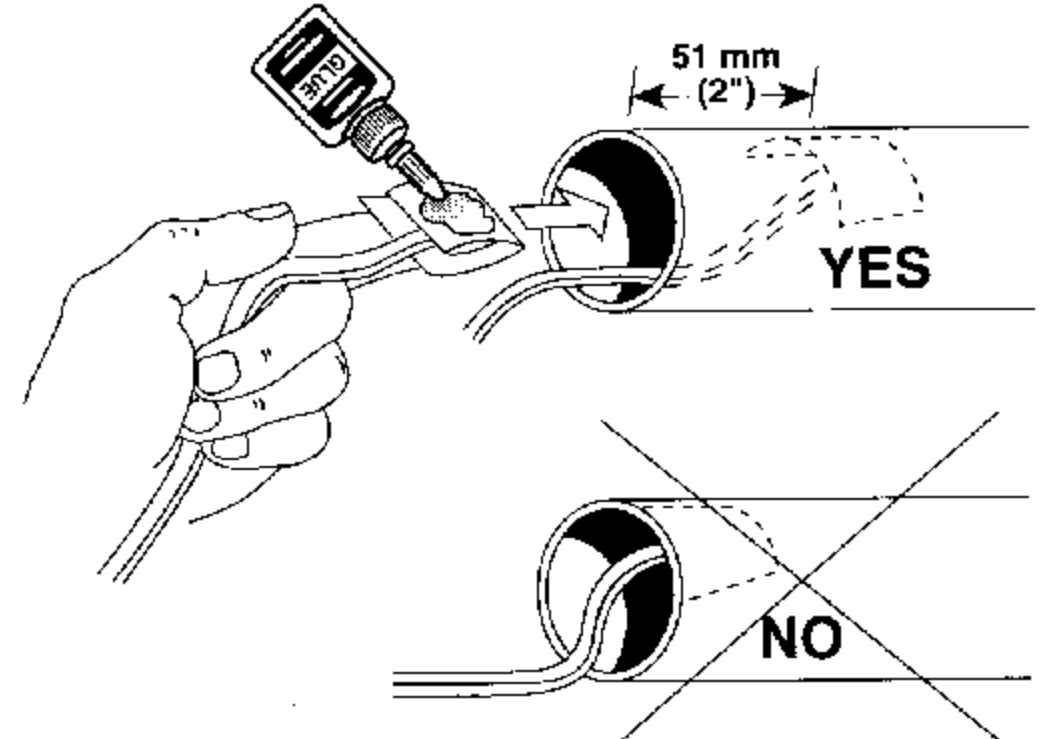
B. Spread glue on section 2 and lay end of shock cord into glue. Fold Section 1 over.

C. Spread glue on section 3 and fold section 2 over.

D. Clamp unit together with fingers until glue sets.

21.

A. Apply glue to inside front of body tube to cover an area no less than 51mm (2") from end of tube and the same size as the shock cord mount.



B. Press mount into glue and hold till glue sets.

22.

Assemble both the 30 cm (12") and the 45 cm (18") parachutes following these steps.

A. Cut out 'chute on dotted line.

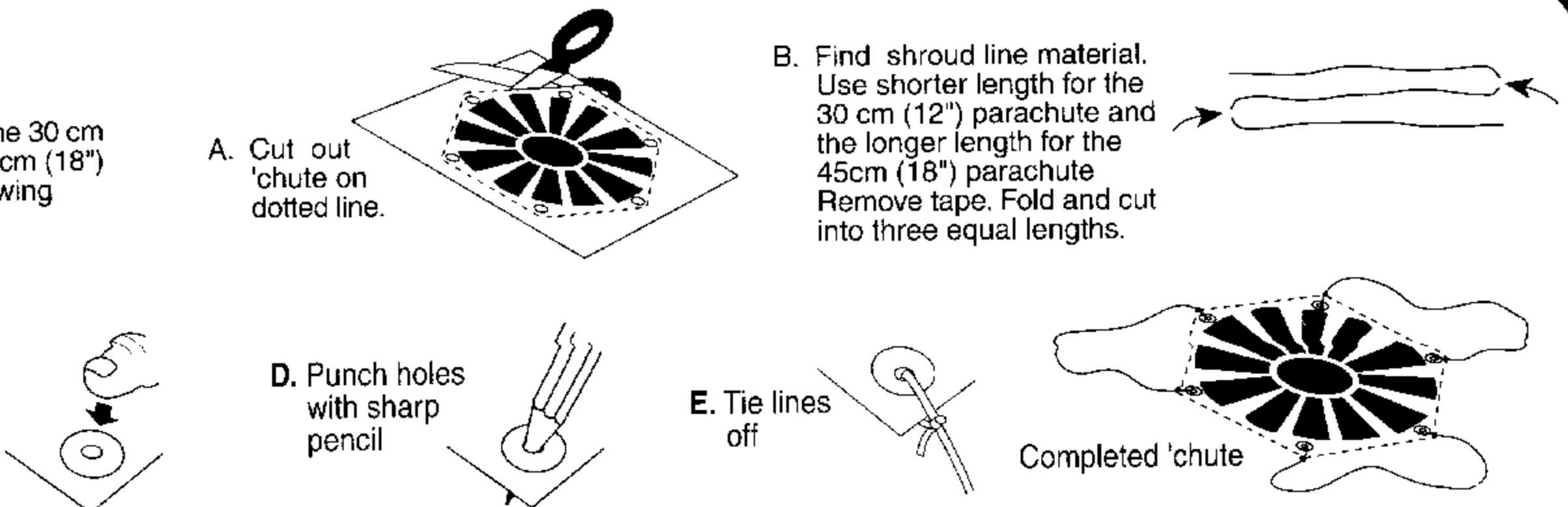
B. Find shroud line material. Use shorter length for the 30 cm (12") parachute and the longer length for the 45cm (18") parachute. Remove tape. Fold and cut into three equal lengths.

C. Press tape rings on marks on corners

D. Punch holes with sharp pencil

E. Tie lines off

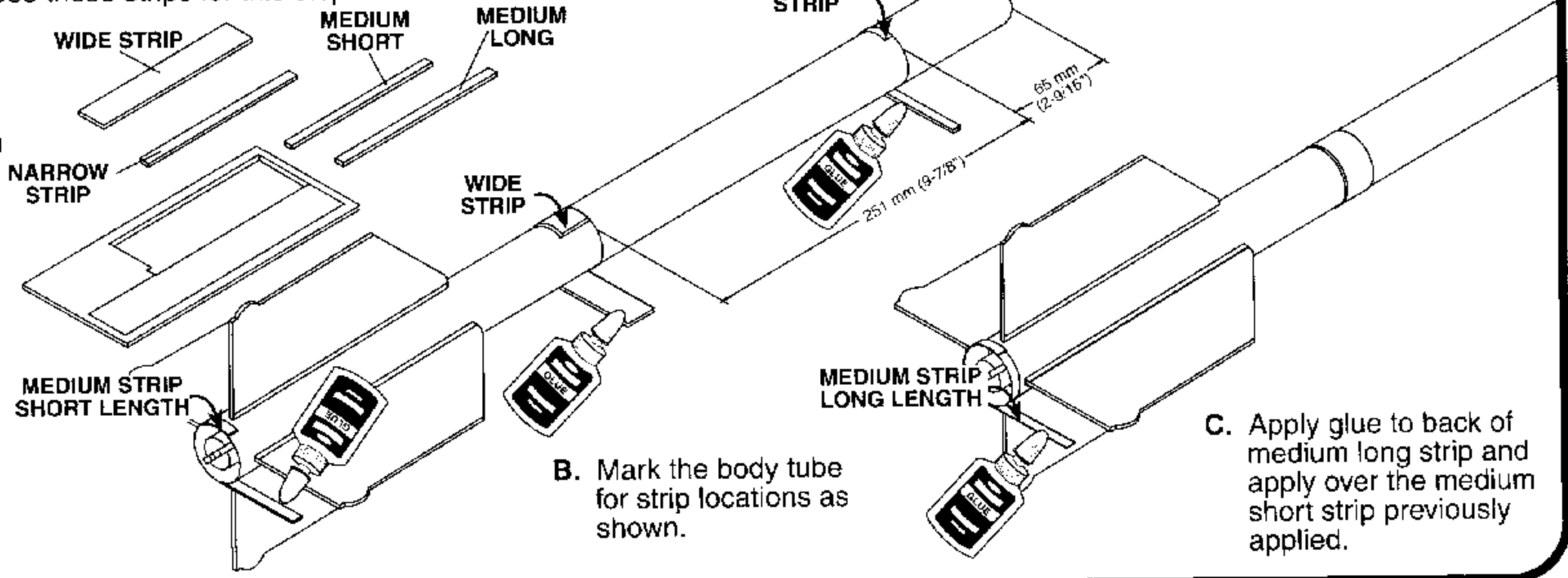
Completed 'chute



14.

Use these strips for this step.

A. Cut the remaining die cut strips from the die cut card. Apply glue to back side of strips and apply in locations shown.

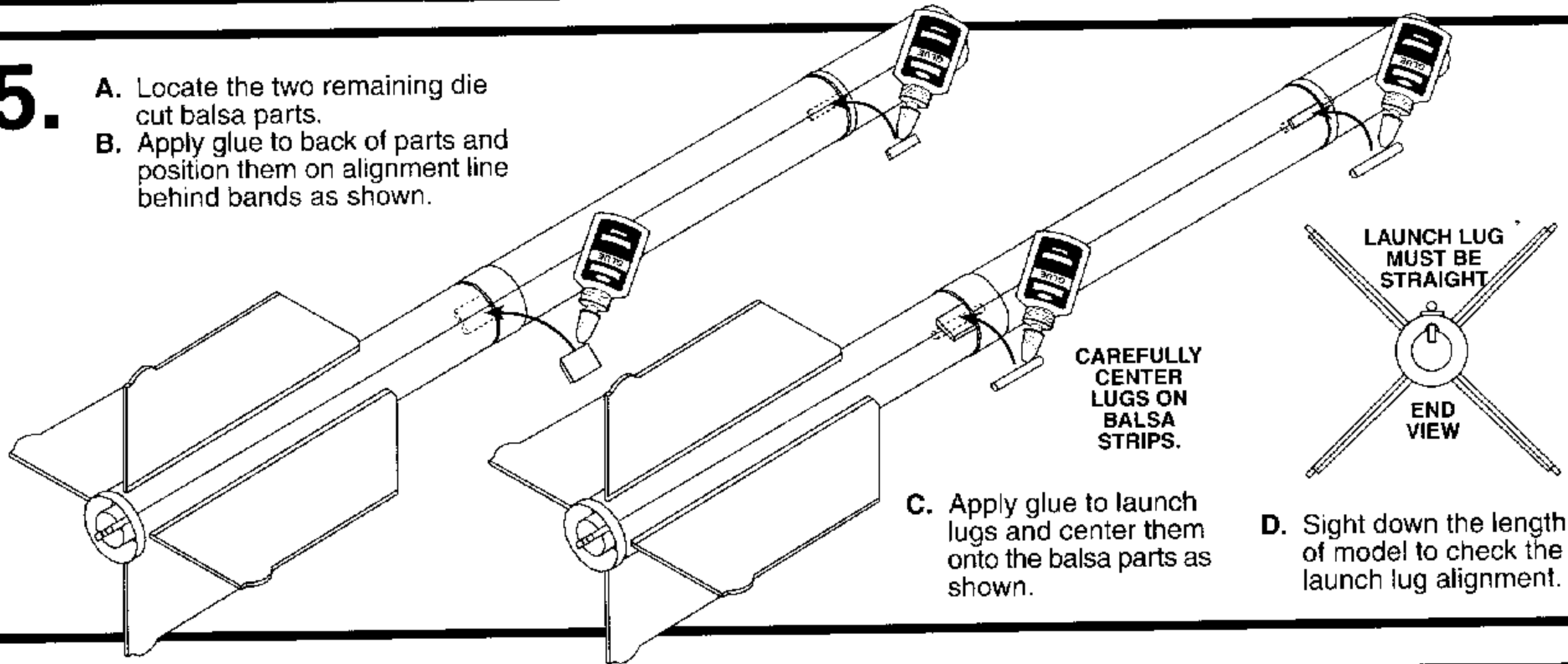


B. Mark the body tube for strip locations as shown.

C. Apply glue to back of medium long strip and apply over the medium short strip previously applied.

15.

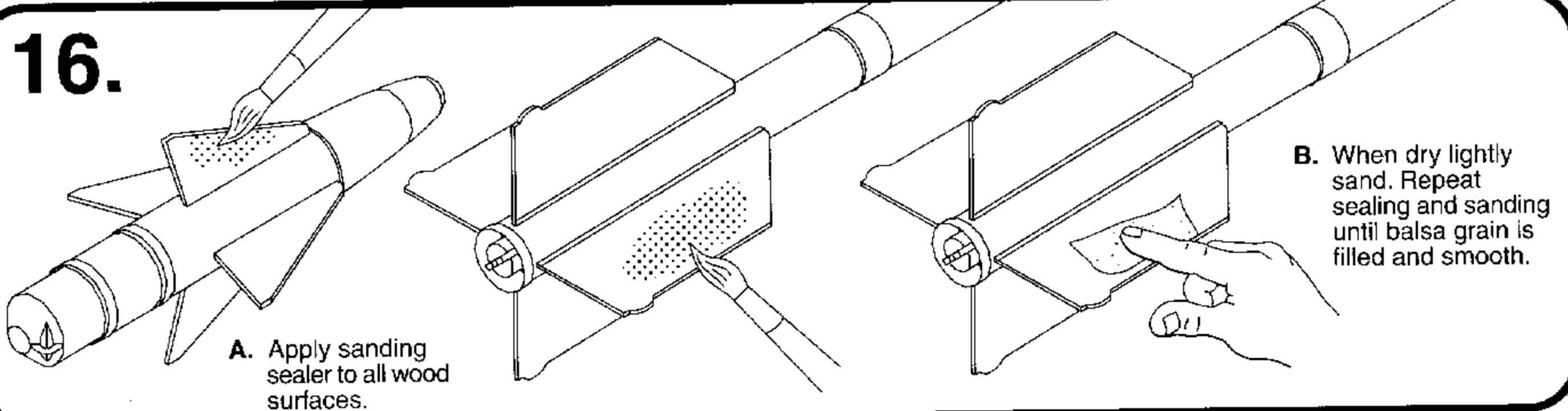
A. Locate the two remaining die cut balsa parts.
B. Apply glue to back of parts and position them on alignment line behind bands as shown.



C. Apply glue to launch lugs and center them onto the balsa parts as shown.

D. Sight down the length of model to check the launch lug alignment.

16.



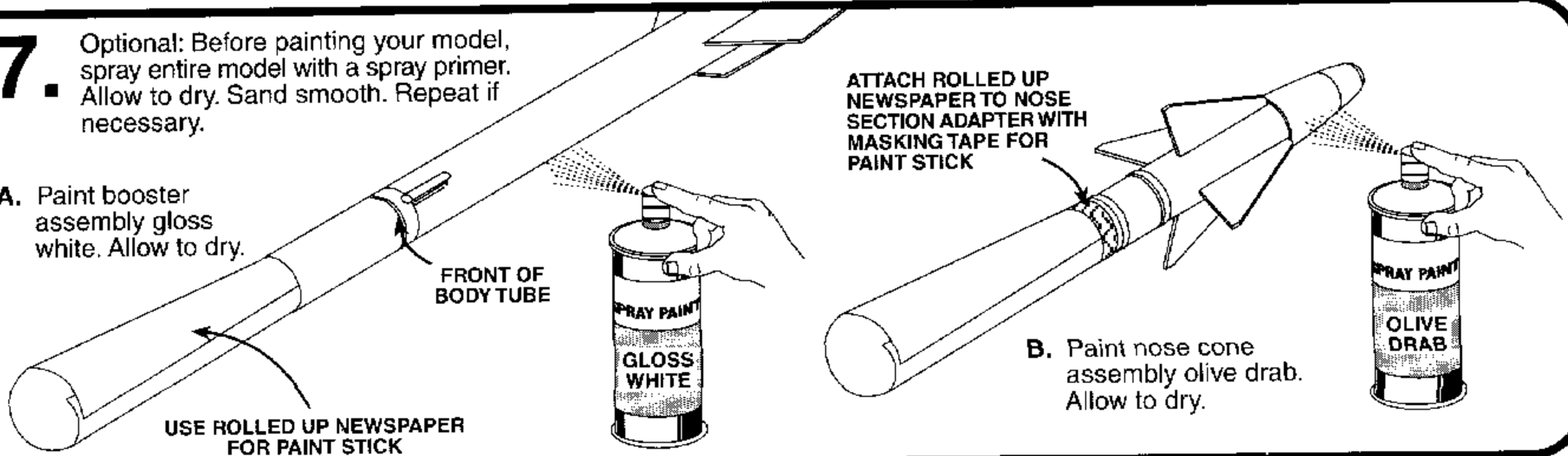
A. Apply sanding sealer to all wood surfaces.

B. When dry lightly sand. Repeat sealing and sanding until balsa grain is filled and smooth.

17.

Optional: Before painting your model, spray entire model with a spray primer. Allow to dry. Sand smooth. Repeat if necessary.

A. Paint booster assembly gloss white. Allow to dry.

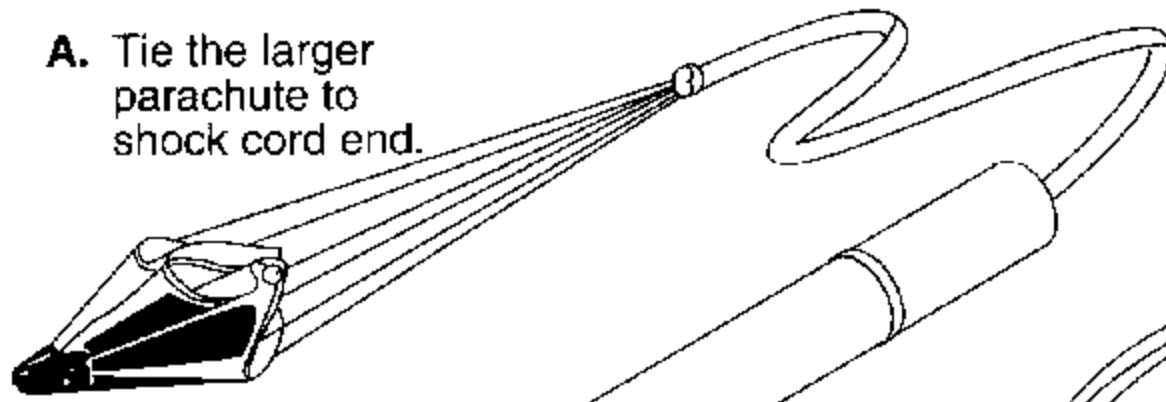


ATTACH ROLLED UP NEWSPAPER TO NOSE SECTION ADAPTER WITH MASKING TAPE FOR PAINT STICK

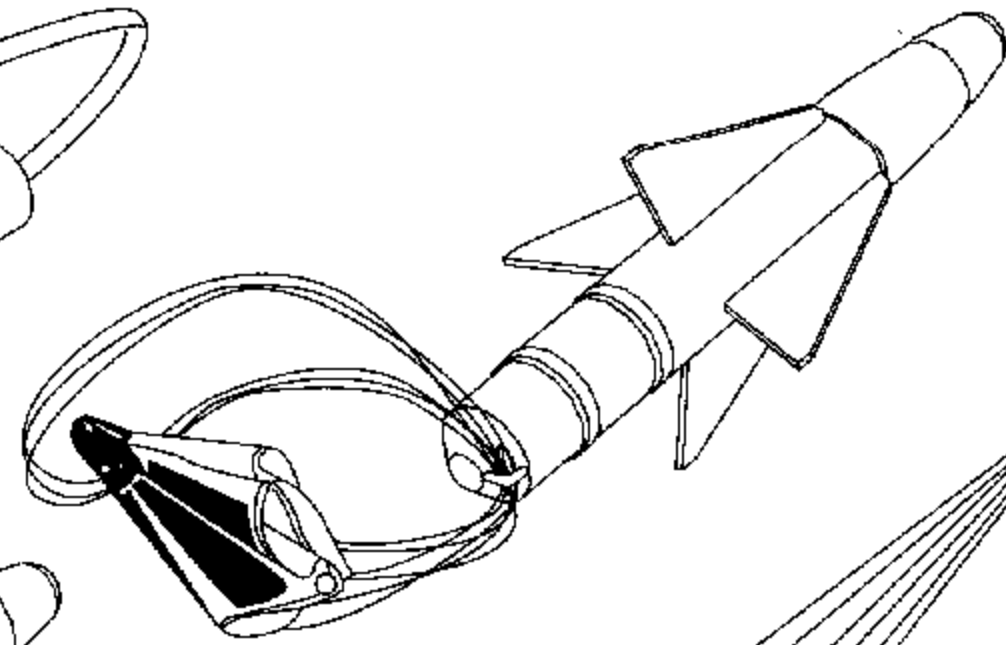
B. Paint nose cone assembly olive drab. Allow to dry.

23.

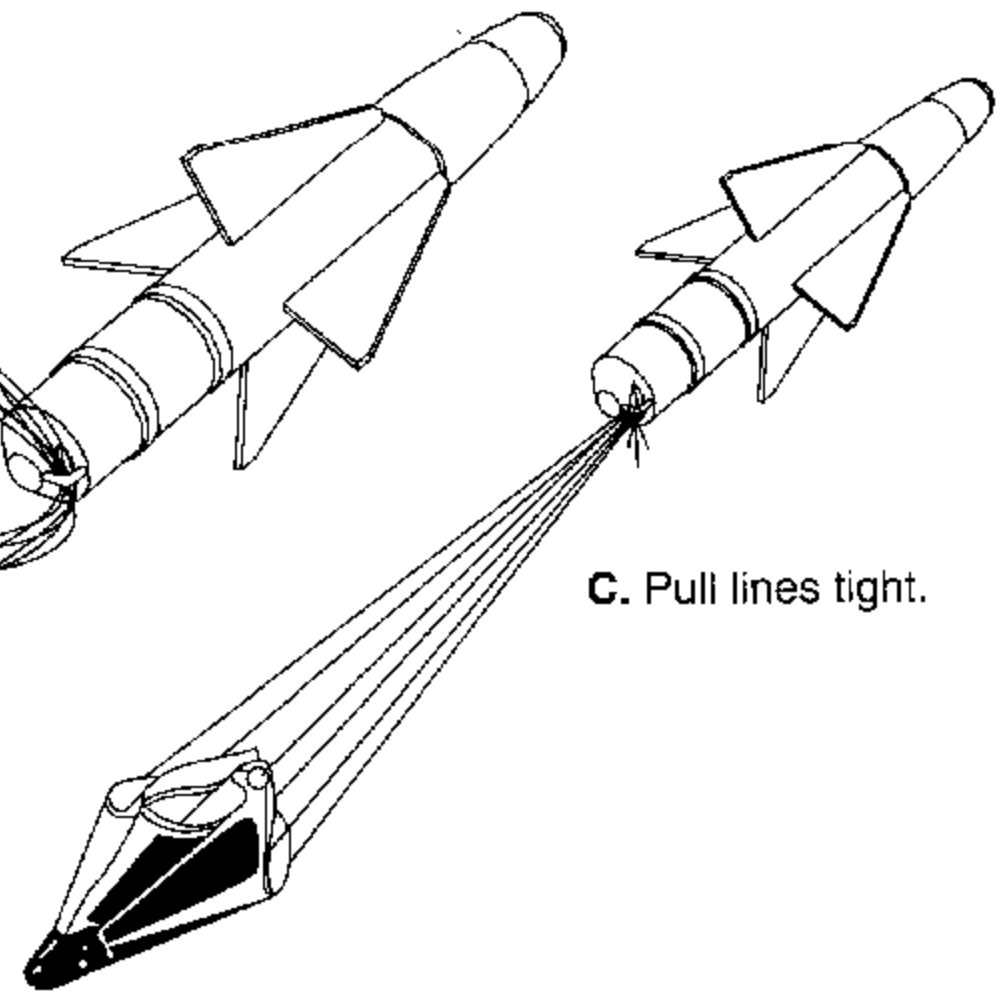
A. Tie the larger parachute to shock cord end.



B. Attach the small parachute to the loop of the nose cone assembly.

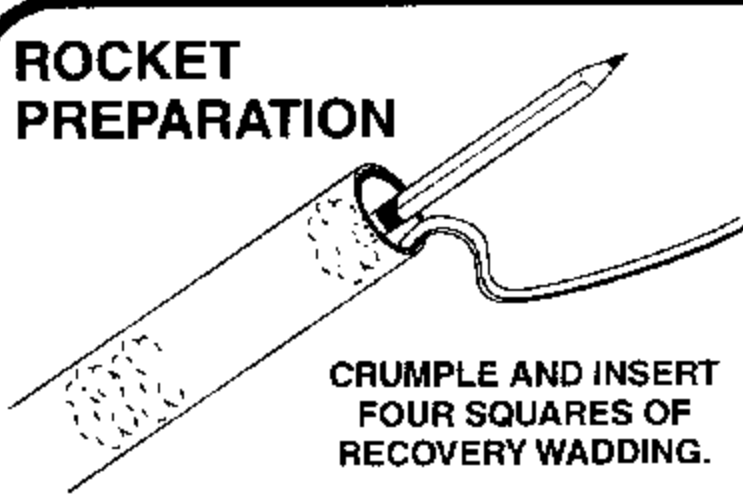


C. Pull lines tight.



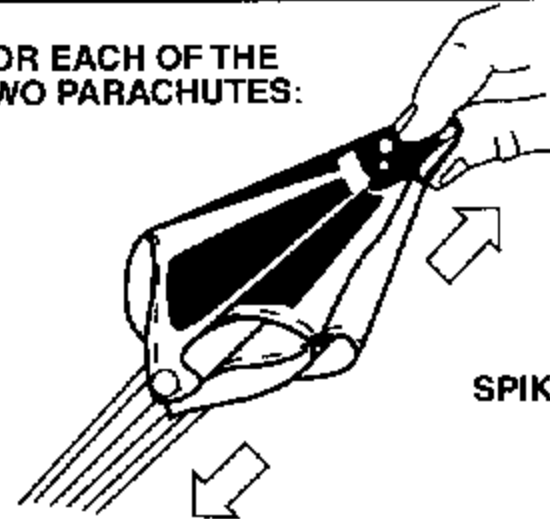
FLYING YOUR ROCKET

ROCKET PREPARATION

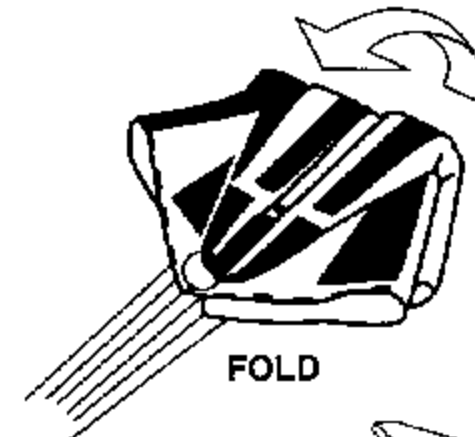


CRUMPLE AND INSERT FOUR SQUARES OF RECOVERY WADDING.

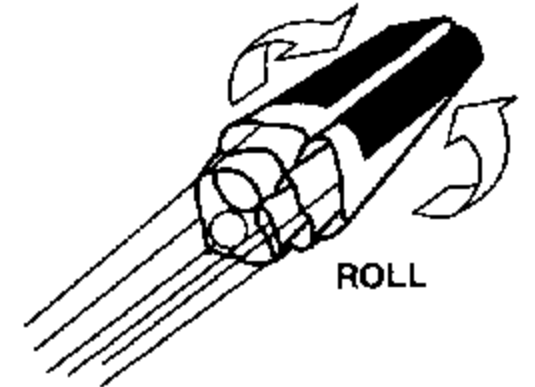
FOR EACH OF THE TWO PARACHUTES:



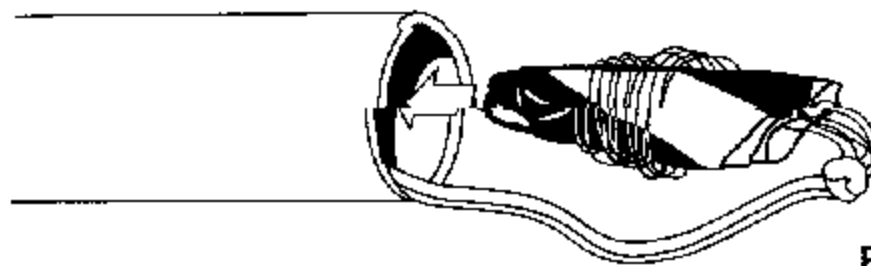
SPIKE



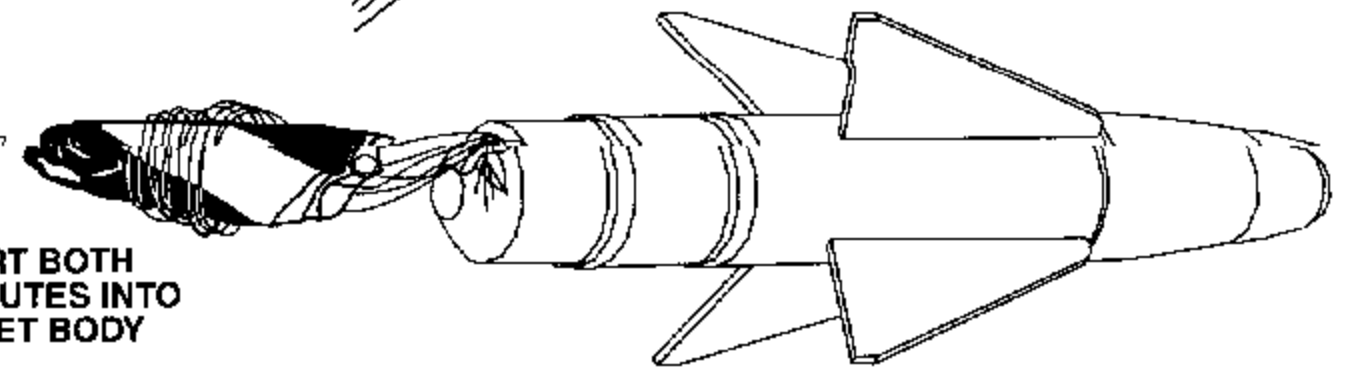
FOLD



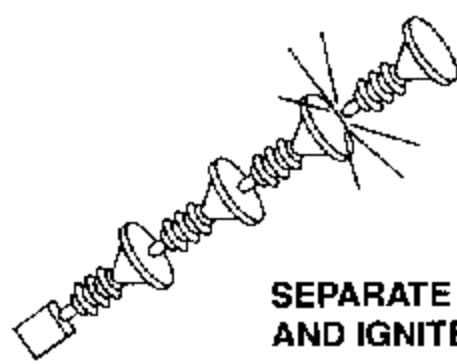
ROLL



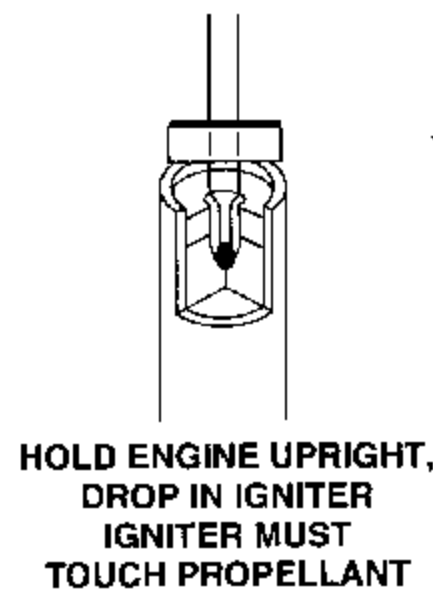
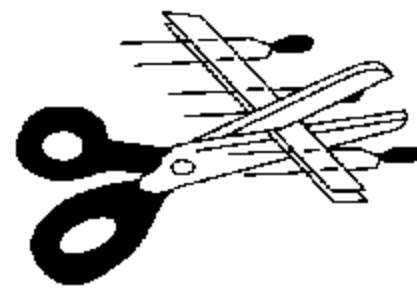
INSERT BOTH PARACHUTES INTO ROCKET BODY



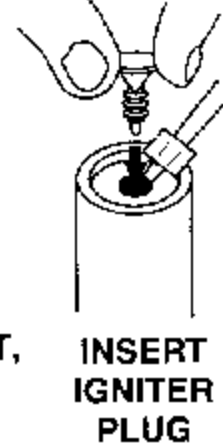
ENGINE PREPARATION



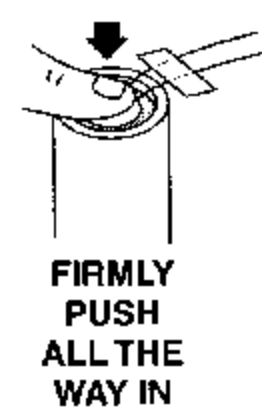
SEPARATE IGNITER AND IGNITER PLUG



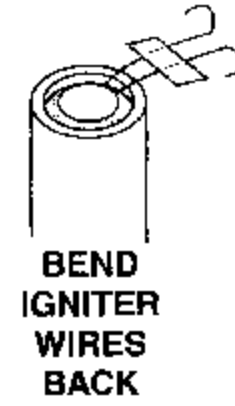
HOLD ENGINE UPRIGHT, DROP IN IGNITER. IGNITER MUST TOUCH PROPELLANT



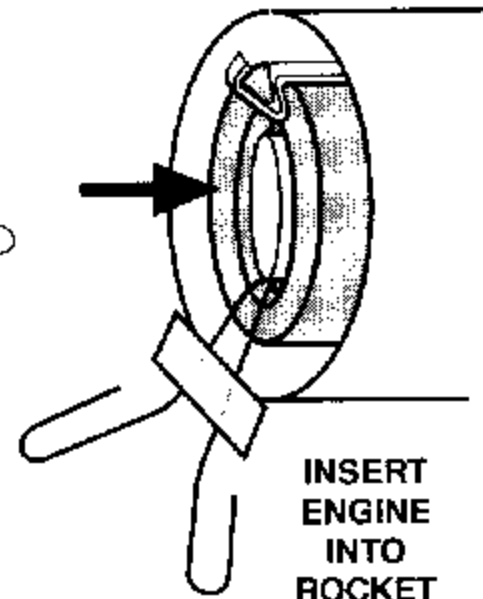
INSERT IGNITER PLUG



FIRMLY PUSH ALL THE WAY IN



BEND IGNITER WIRES BACK



INSERT ENGINE INTO ROCKET

LAUNCH SUPPLIES

To launch your rocket, you will need the following:

- Launch Pad (Estes Porta-Pad® II)
- Launch Controller (Estes Electron Beam®)
- Recommended Estes Engines: C6-3 and C6-5
- Recovery Wadding (EST302274), Igniters and Igniter Plugs (included with Estes engines)
- Use only Estes products to launch this rocket.

TIPS FOR FLYING YOUR SIDEWINDER

- Choose a large field away from power lines, tall trees, and low flying aircraft.
- Try to find a field at least 76 meters (250 feet)square. The larger the launch area, the better your chances of recovering your rocket.
- Launch area must be free of dry weeds and brown grass.
- Launch only during calm weather with little or no wind and good visibility.
- Don't leave parachutes packed more than a minute or so before launch during cold weather (colder than 4° Celsius [40° Fahrenheit]). Parachutes may be dusted with talcum or baby powder to avoid sticking.
- If you use the E2® or the Command Control™ Launch Controllers follow the instructions provided with those models.
- Always follow the National Association of Rocketry (NAR) MODEL ROCKETRY SAFETY CODE while participating in any model rocketry activity.