

P E N

A MINIJET HIGH ALTITUDE MODEL

ASSEMBLY INSTRUCTIONS:

Start assembly of nose cone by inserting shock cord through hole in bottom of nose cone adaptor. Tie knot large enough to keep cord in place.

Put a thin coat of plastic (styrene) cement around inside of nose cone. Rub cement with the end of your finger to smooth it out and remove excess. Use cement sparingly as it will melt nose cone.

Insert adaptor into nose cone then slip nose cone into body tube to insure alignment. With a twisting motion, carefully remove nose cone from body tube and allow to dry.

Punch two holes with a pencil 1/2" apart in the gauze shock cord anchor and thread cord into anchor as shown. Smear glue with a brush or "Q" Tip in body tube about the size of the anchor 3/4" from end. Insert shock cord and anchor into body tube and push into glue with a pencil until securely set in place.

The rocket is recovered by streamer which is taped to the center of the shock cord with masking tape.

Glue launch lug 2 1/2" from rear, halfway between fins. Sight along tube and align lug so that it is parallel to body.

Using a "Q" Tip or brush, smear white glue around inside of body 2" from end. Insert engine block and push it forward with an engine until 1/8" of engine protrudes. Remove engine as soon as stop is positioned.

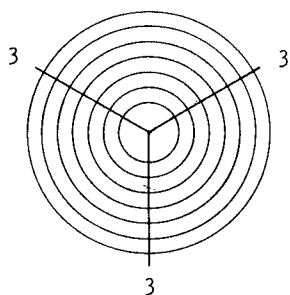
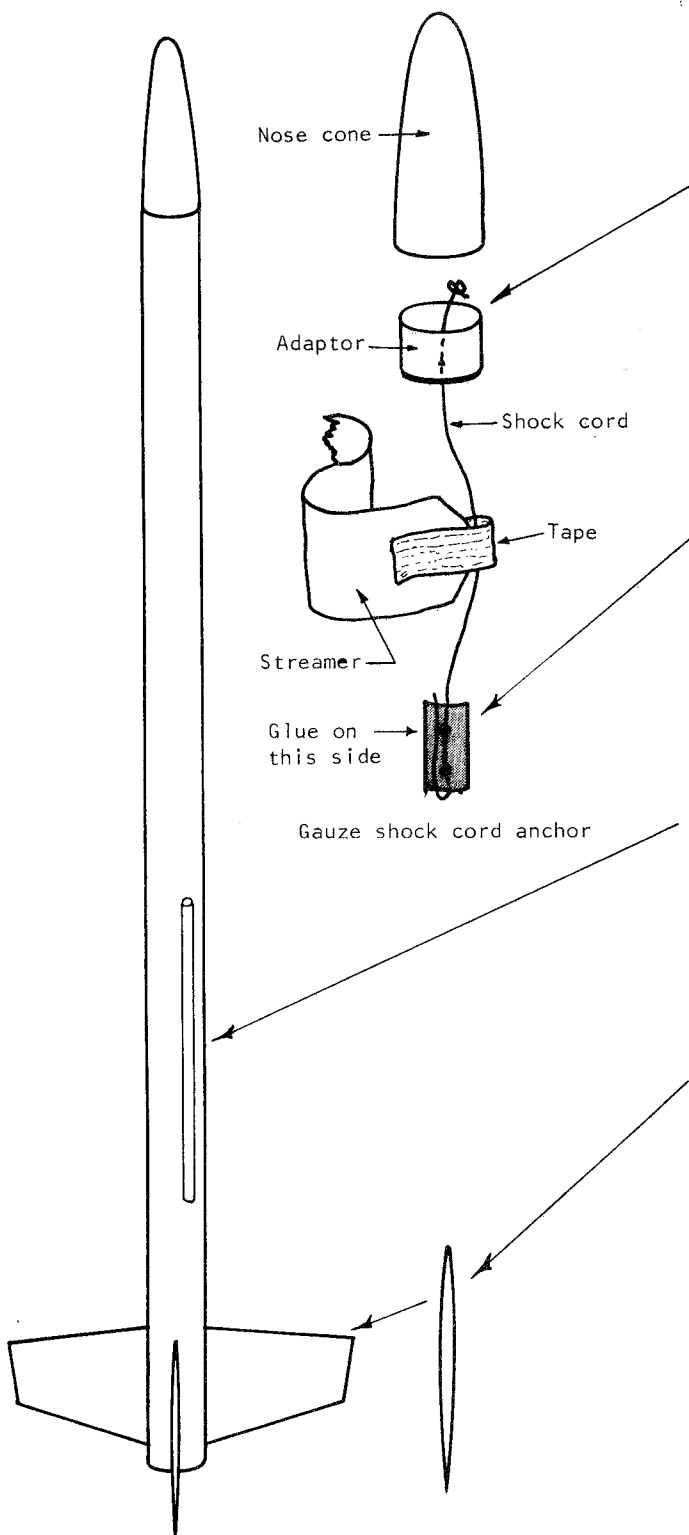
Sand fins to an airfoil shape. The front (leading) edge should be rounded while the rear (trailing) edge should be sharp like a knife. The root edge (part that glues to the body) should be straight and square.

Using the fin spacing guide, center the end of the body tube in the circles and mark at the 3. Use a "V" notch of a drawer or door frame and draw a line at the mark parallel to the body. Glue the three fins on this line flush with the bottom of the body. When dry, apply a glue fillet on each side of all fins.

Finish the rocket by filling all wood surfaces with sanding sealer. Coat several times sanding between each coat until wood is smooth. Coat body tube with sanding sealer and sand until smooth. Paint entire rocket, except nose cone, with a bright color.

FLYING INSTRUCTIONS:

The Pen is a high efficiency single stage model that can be flown with a 1/2A3-5M, A3-6M or B3-7M Minijet engine. Push flameproof wadding into body until it rests against engine stop. Fold streamer carefully and insert it in body tube making sure that all the shock cord is inside body tube. Insert nose cone. Following engine manufacturer's safety instructions, install an igniter in engine. Wrap engine with tape until it fits snugly into the body tube. Push in place snug against engine block. Place rocket on the launch rod, attach igniter clips and countdown and fire.



FIN SPACING GUIDE