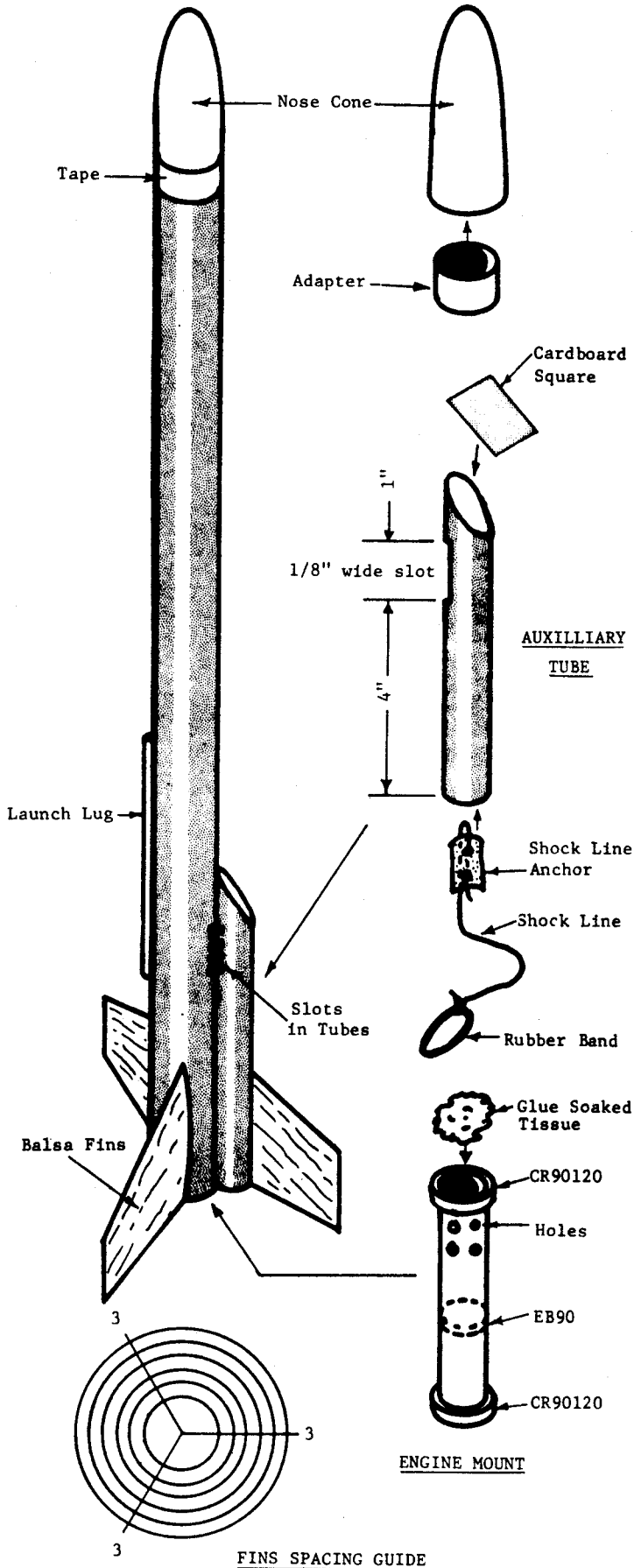


TACHYON

ASSEMBLY INSTRUCTIONS:



Start assembly of nose cone by putting 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 adapter 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.

Use a "V" notch of a drawer or door frame and draw a line on the main body tube about 6" long. Do the same on the auxiliary body tube along its longest side. Cut matching slots 1/8" x 1" four inches from the end of each tube. The slot in the auxiliary body tube should be nearest the beveled end.

Glue the cardboard square to the beveled end of the auxiliary body tube. Cover the entire square with a thick coat of glue to protect it from engine ejection and keep in place under pressure. Allow to dry and trim to shape of tube. Glue parallel to main body tube matching slots. Put a glue fillet around slot to stop pressure leaks.

Glue two centering rings on outside ends of engine mount. Take a square of toilet tissue and soak it in white glue. Stuff it into the end of mount with the holes so that it blocks the end of tube completely but does not block the holes. Apply more glue or paper as necessary for a tight seal. Using a "Q" Tip or brush smear glue around inside of mount 2" from open 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.

Using a long "Q" Tip or brush smear lots of glue 5 1/2" from bottom end of body tube. Insert completed engine mount with open end out into body tube until flush.

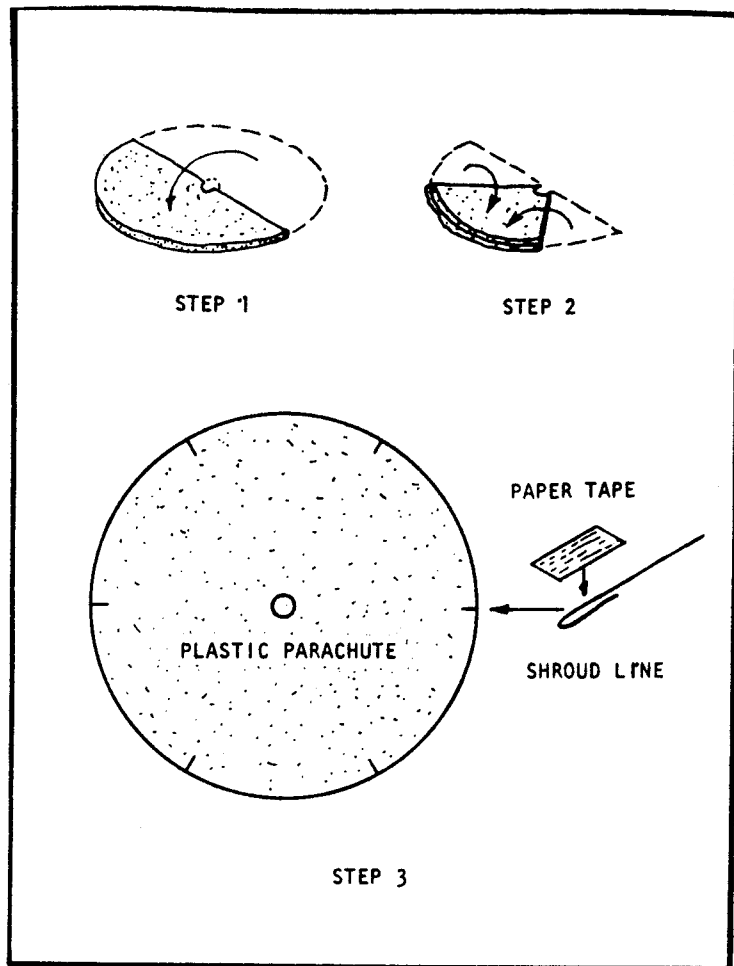
Sand fins to an airfoil shape. The front (leading) edge should be rounded while the rear (trailing) edge should be sharp like a knife. The root edge (part that glues to the body) should be straight and square.

Using the fin spacing guide, center the main body tube and align the auxiliary body tube with a 3 and mark. Mark main body tube at the other two 3's. Use a "V" notch of a drawer or door frame and draw a line at each mark parallel to the body tubes. Glue short fin on auxiliary body tube along line. Glue the other fins on main body tube flush with bottom. When dry, apply a glue fillet on each side of all fins.

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 auxiliary body tube about the size of the anchor 3/4" from end. Insert shock cord and anchor into auxiliary body tube and push into glue with a pencil until securely set in place. Tie other end to rubber band.

Glue launch lug 3 1/2" from rear, halfway between fins. Sight along tube and align lug so that it is parallel to body.

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.



PARACHUTE INSTRUCTIONS:

Parachute is precut to a circular shape. Fold in half, then fold in thirds to obtain the location of the shroud lines. Crease parachute at folds or mark with marking pencil. Cut off tip of parachute when folded to provide a vent hole to aid in parachute folding and opening after ejection. When reopened there should be 6 equally spaced places for shroud lines.

Cut 6 shroud lines, equal in length to the diameter of the parachute.

Cut 6 pieces of wide tape about 5/8" long. Peel off paper backing and attach by pressing tape over a loop of shroud line.

Gather free ends of shroud line together, insert through snap swivel and tie into a knot. Apply a drop of glue to knot so it will not loosen. Attach snap swivel to hook in nose cone or payload coupler.

There are many ways of folding a parachute for insertion into a body tube. Experience will dictate the best method for each individual. One way is to first dust the parachute with talcum powder to keep it from sticking to itself. Then form the parachute by holding the snap swivel with one hand and tip of canopy with the other and straighten the chute. Fold the canopy once or twice to fit the space in the body tube and insert it. Pack the shroud lines and shock cord in over the parachute and push the nose cone or payload section into place.

FLYING INSTRUCTIONS:

Designed for 21 mm engines from A4-4 to D6-6, this rocket uses rear ejection for the recovery device. It can be recovered by parachute or streamer. It was designed for spot landing, predicted altitude, or sport flying for fun. The special baffle system absorbs most of the ejection heat but it is recommended that wadding be used in the auxilliary body tube. Push flameproof wadding into auxilliary body tube from the rear as far as it will go. Fold streamer carefully and insert it in auxilliary body tube with all the shock cord inside body tube. Make sure that it is a snug fit so that it will not deploy on its upward flight.

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 launch.