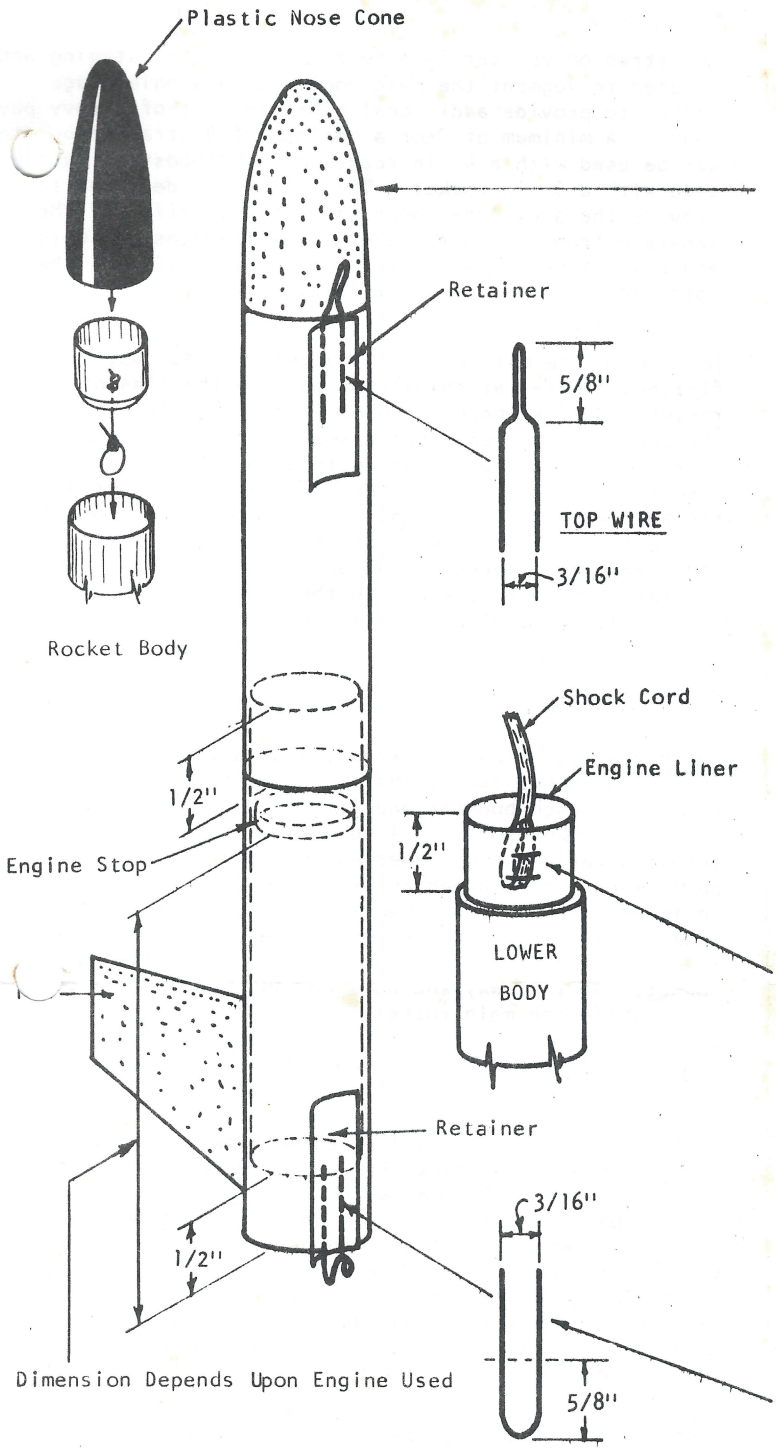
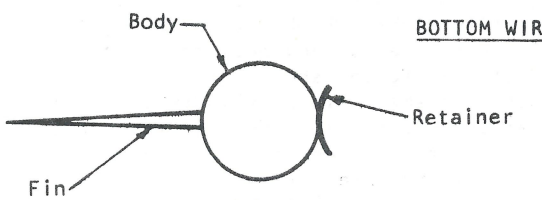
MARCUS

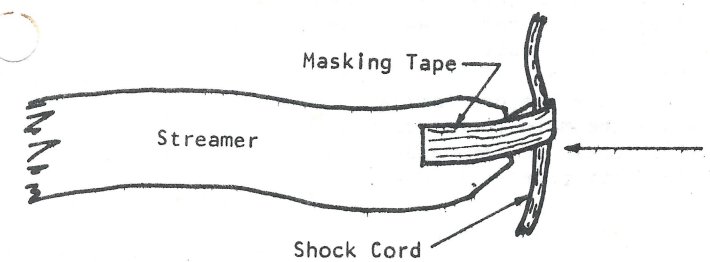
PARALLEL STAGED STRAP ON BOOSTER





BOTTOM WIRE

REAR VIEW



ASSEMBLY INSTRUCTIONS:

Start assembly of nose cone by inserting shock cord through hole in bottom of nose cone adapter. 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 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.

Insert shock cord through string loop and tie with a knot. Wrap nose cone adapter with tape until it fits tightly into end of body tube and glue in place. Nose cone is not meant to separate from body tube. When dry, sand junction of nose cone and body tube lightly with fine sandpaper until joint is smooth.

Glue 3/8" x 1" retainer to body tube so that top edge is even with junction of nose cone and long side is parallel with body tube.

Cut a piece of stiff wire 2 3/4" long and bend to shape of top wire as shown. Glue securely to junction of retainer and body tube.

Smear glue on inside of body tube and insert engine liner until 1/2" protrudes. This acts as a coupler between body tubes.

Cut slits 3/16" apart in protruding engine liner. Take the end of the shock cord that extends from the upper body tube and push it through the lower slit and into the upper slit as shown. Glue shock cord in place.

Using a "Q" tip or brush, smear white glue around inside of body approximately the length of the engine to be used. Insert the engine stop and push it forward with an engine until 1/8" of the engine protrudes from rear of body tube. Remove engine as soon as stop is positioned to keep from gluing engine in place.

Glue the 3/8" x 1" retainer to the lower body tube so that one edge is even with bottom and long side is parallel with body tube.

Cut a piece of stiff wire 2 3/4" long and bend it to the shape of the bottom wire as shown. Glue securely to junction of retainer and body tube with 5/8" extending beyond bottom. After the glue is dry bend a hook in the wire as shown to hook over the bottom of the main rocket body tube. To operate properly there must be sufficient clearance inside the body tube to allow the wire to hook over the edge and slide off easily.

Sand pre-cut fin 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. Sand body at fin location opposite lower retainer. Place a mark for the fin on the body tube directly opposite retainer as shown on rear view. Use a "V" notch of a drawer or door frame and draw a line at the mark parallel to the body. Glue the fin on this line flush with the bottom of the body. When dry, apply a glue fillet on each side of the fin.

The booster is recovered by streamer which is taped to the center of the shock cord as shown on the drawing.