

FLARE-PATRIOT

CONTEST PROVEN FOR NAR QUADRATHON COMPETITION

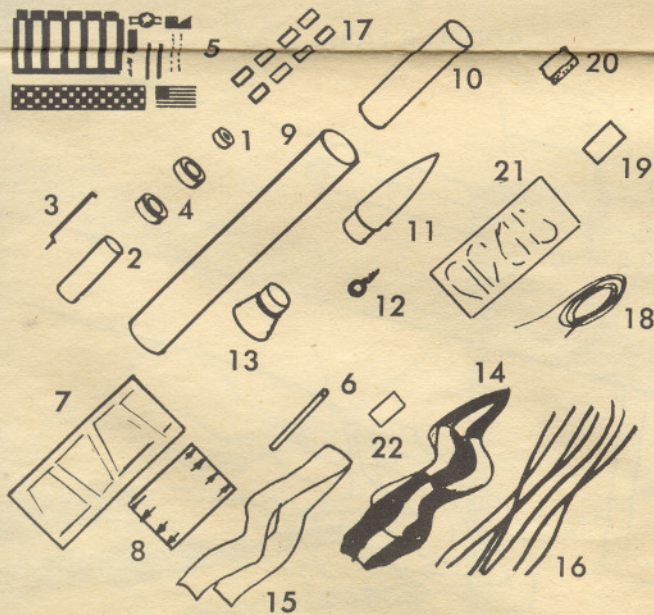
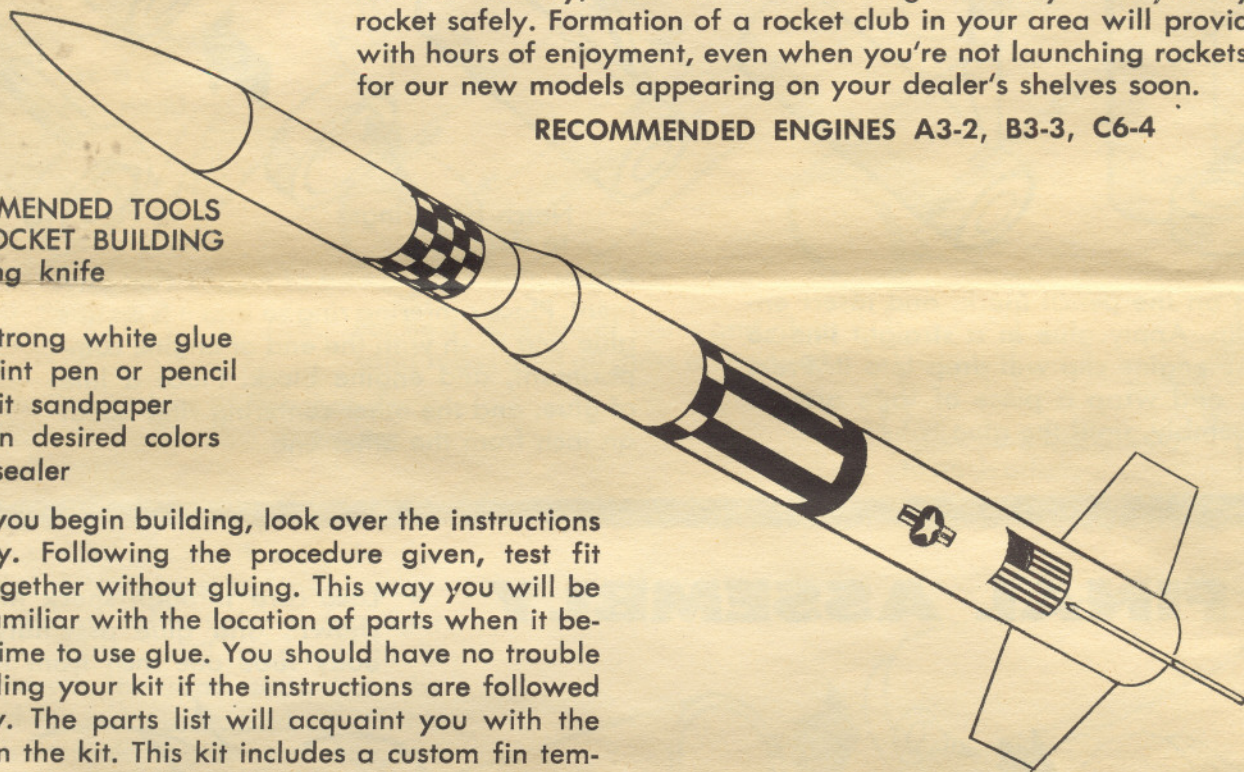
This model rocket has been designed and developed to give you a straight, high flight if the instructions are followed carefully. The exciting and educational sport of model rocketry has grown into a full scale national activity, and will continue to grow every time you fly your rocket safely. Formation of a rocket club in your area will provide you with hours of enjoyment, even when you're not launching rockets. Look for our new models appearing on your dealer's shelves soon.

RECOMMENDED ENGINES A3-2, B3-3, C6-4

RECOMMENDED TOOLS FOR ROCKET BUILDING

- Modeling knife
- Scissors
- Extra strong white glue
- Ball point pen or pencil
- Fine grit sandpaper
- Paint, in desired colors
- Wood sealer

Before you begin building, look over the instructions carefully. Following the procedure given, test fit parts together without gluing. This way you will be more familiar with the location of parts when it becomes time to use glue. You should have no trouble assembling your kit if the instructions are followed properly. The parts list will acquaint you with the pieces in the kit. This kit includes a custom fin template. If the use of these fins is desired over the use of the standard fins, follow instructions on template.

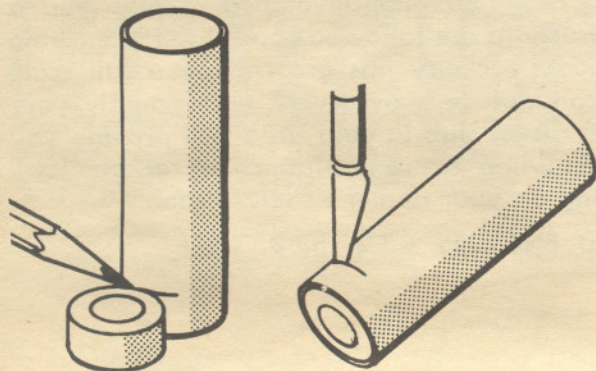


PARTS LIST

- | | |
|------------------------|------------------------|
| 1 ENGINE BLOCK | 12 SCREW EYE |
| 2 ENGINE COMPARTMENT | 13 COUPLER |
| 3 ENGINE CLIP | 14 PARACHUTE |
| 4 CENTERING RINGS | 15 STREAMER |
| 5 DECALS | 16 SHROUDS |
| 6 LAUNCHING LUG | 17 SHROUD TABS |
| 7 FIN SHEET | 18 CORD |
| 8 FIN GUIDE | 19 SHOCK MOUNT |
| 9 BODY TUBE | 20 WADDING |
| 10 BODY TUBE (PAYLOAD) | 21 CUSTOM FIN TEMPLATE |
| 11 NOSE CONE | 22 ADDRESS LABEL |

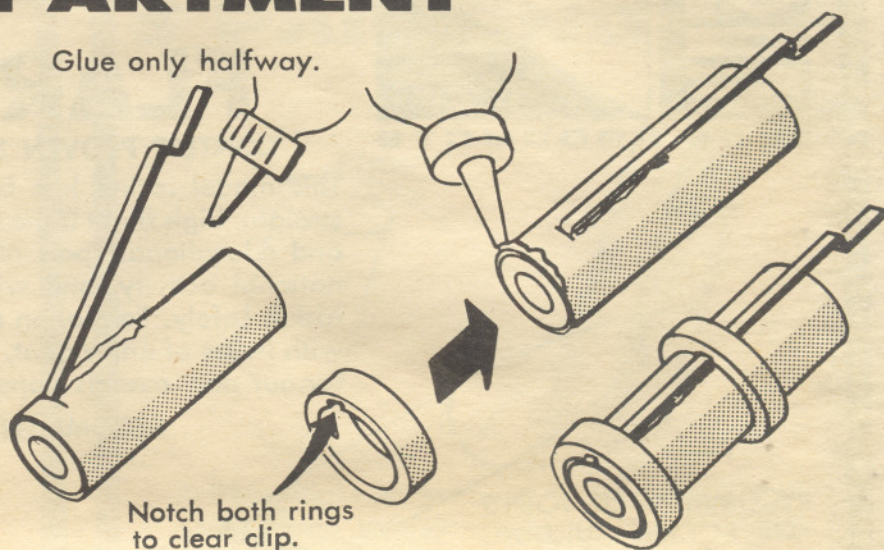
1 ENGINE COMPARTMENT

Place an engine block against engine compartment, and mark with a pencil as shown. Apply glue inside this end of engine compartment, and insert engine block.



Cut slit on the pencil mark, and insert engine clip. Apply glue in a straight line so that the engine clip will drop into it. Press firmly, and wrap a piece of tape around the assembly, until the glue is hard.

Glue only halfway.

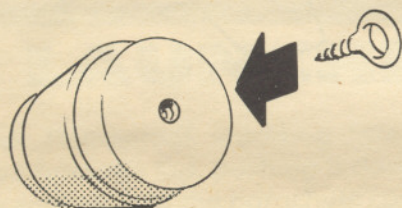


Notch both rings to clear clip.

Apply glue around end of engine compartment. Place centering ring so that it is on this glue and flush with the end of engine compartment, and engine block. Place a line of glue, and the other centering ring about an inch from the other end.

3 FINAL ASSEMBLY

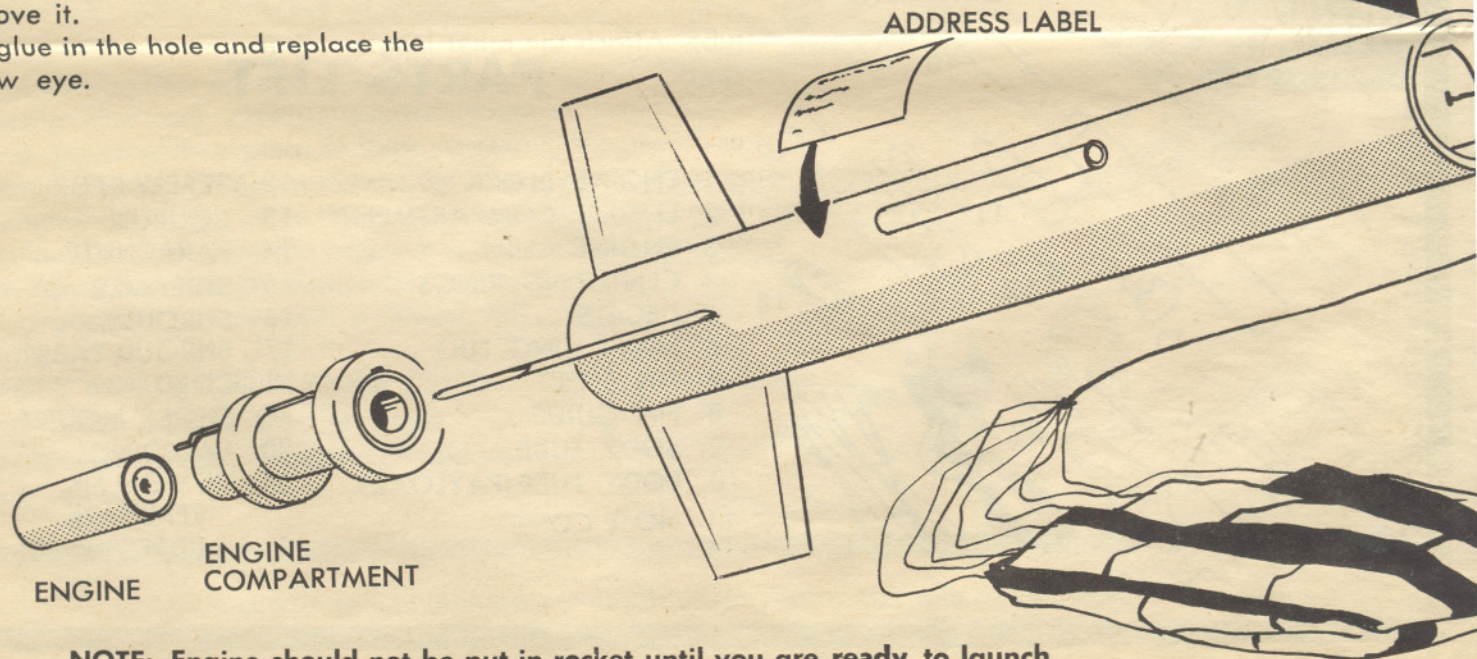
Lace cord through shock mount as shown, and glue assembly inside body tube one inch from the end.



Put screw eye into coupler, then remove it. Put glue in the hole and replace the screw eye.

If parts fit loose in body tubes, wrap with a piece of tape.

ADDRESS LABEL



WAD
Use approx 1 square

NOTE: Engine should not be put in rocket until you are ready to launch.

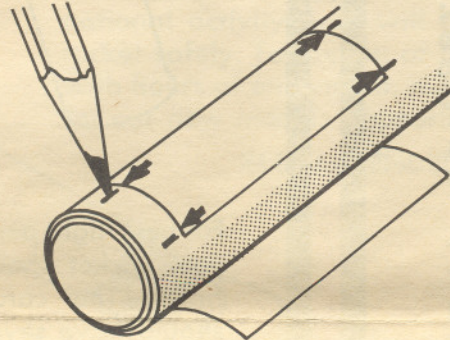
2 FIN ASSEMBLY

The bottom of the launching lug should be $5\frac{1}{2}$ " from bottom of rocket.



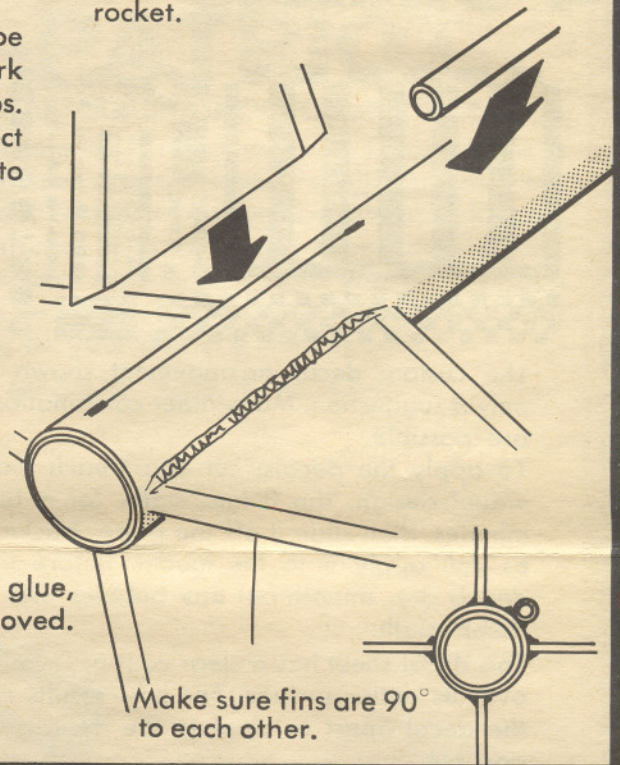
Cut fins from fin sheet. If possible use a ruler to help you get a good straight edge.

Wrap fin guide around body tube where fins will be attached. Mark the body tube near the arrow tips. Remove the fin guide and connect these marks with a straight line to show attaching points.



For best adhesion of paint and glue, sand tubes until all gloss is removed.

Sand the three edges of fins that do not attach to body tube. Sand the surfaces smooth.



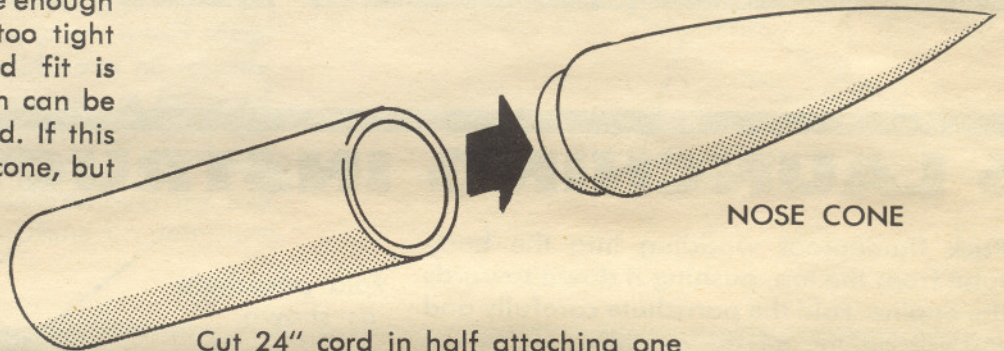
Make sure fins are 90° to each other.

The coupler must fit snug in the body tube, but must be loose enough to eject. If the coupler is too tight sand lightly until a good fit is achieved. The upper section can be used for a 1 ounce payload. If this is desired, don't glue nose cone, but be sure of a snug fit.

ING

prox. inch.

Glue here.

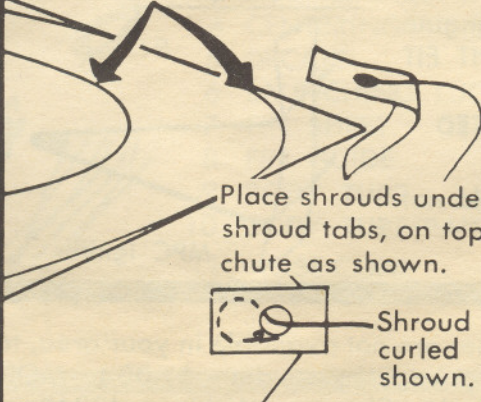


NOSE CONE

Cut 24" cord in half attaching one length to parachute and main body tube. Attach the other length to the streamer and coupler. If dual recovery is not desired, either the streamer or parachute may be used singly.

Parachute may be made smaller by cutting on these lines.

For faster Descent, center of parachute may be cut out.



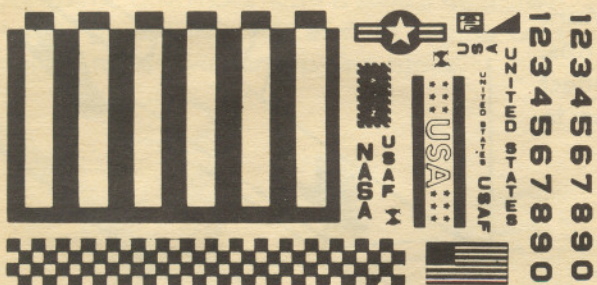
Place shrouds under shroud tabs, on top of chute as shown.

Shroud should be curled under tab as shown.



Place knot here.

4 DECALS

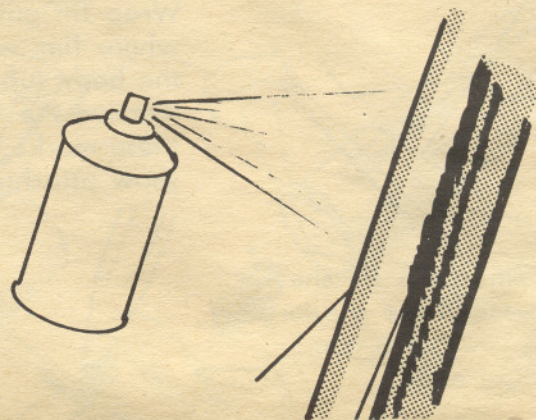


The custom decal arrangement shown is only a suggestion. Many other combinations are possible.

To apply the decals; cut apart each individual design, dip it into water for a few minutes, then slide it off the paper backing as you apply it to the model. Before the decals dry, smooth out any bubbles with a damp cloth.

This decal sheet has a clear coat of lacquer over its entire surface. For best results cut the decal apart as close to the designs as possible.

5 PAINTING



For best flight performance and appearance your rocket should have a smooth, hard finish. The cardboard and balsa parts should have several coats of sealer, sanding lightly between each coat. When painting, if a brush is used, sand carefully after each coat. If a spray can is used, apply several light coats avoiding runs. Bright colors are best for easy spotting and recovery.

6 LAUNCHING INSTRUCTIONS

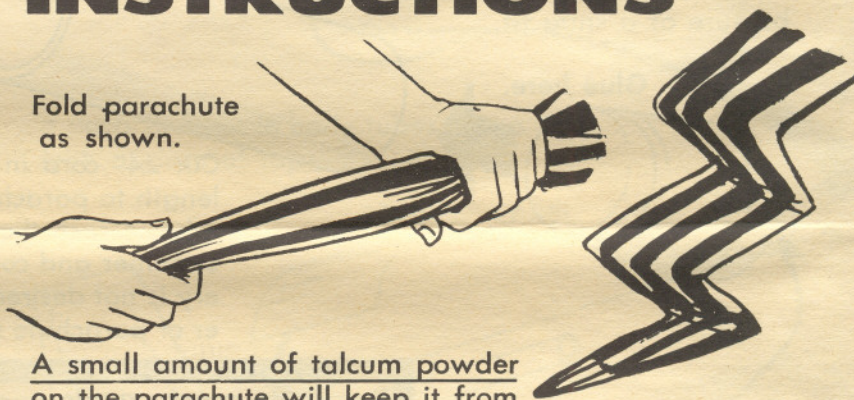
Pack flameproof wadding into the body tube from the top, pushing it down towards the engine. Fold the parachute carefully and pack it on top of the wadding. Pack the shroud lines and cord on top of chute and insert the nose cone assembly in place.

Use an MPC Ignitor or bend a short piece of nichrome wire and insert in engine. Hold wire in place with a piece of tape. Insert the engine in engine compartment. Be sure the engine is a tight fit. If the engine can be pulled out with just the finger it is too loose. Apply tape lengthwise on the engine until a good fit is achieved. A TIGHT FIT IS A MUST!

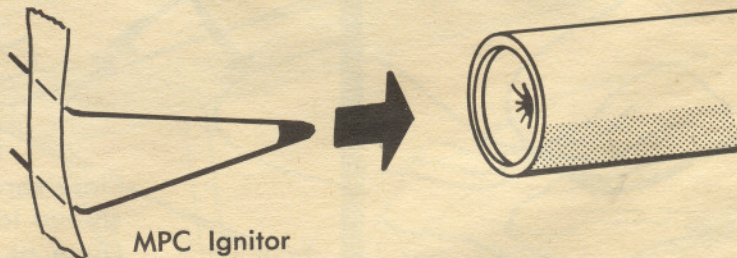
NOW FOLLOW PROCEDURE LISTED ON COUNT DOWN CARD

For extended storage, the chute should not be left folded.

Fold parachute as shown.



A small amount of talcum powder on the parachute will keep it from sticking together.



MPC Ignitor

In the event that engines are not available in your area, take advantage of our three engine package by sending \$1.00 to MODEL PRODUCTS CORP., 126 Groesbeck, Mt. Clemens, Michigan 48043.

TODAY

2121



FLARE PATRIOT



Quick Page Finder

TODAY

1234567890
1234567890



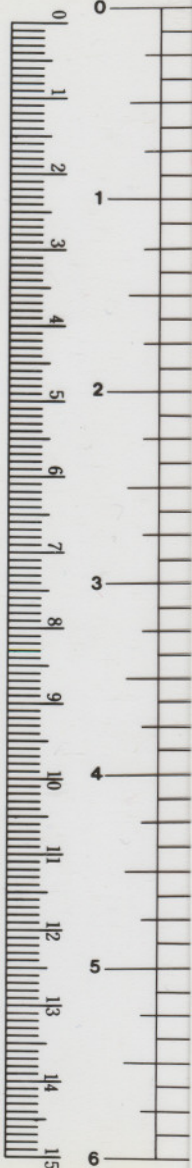
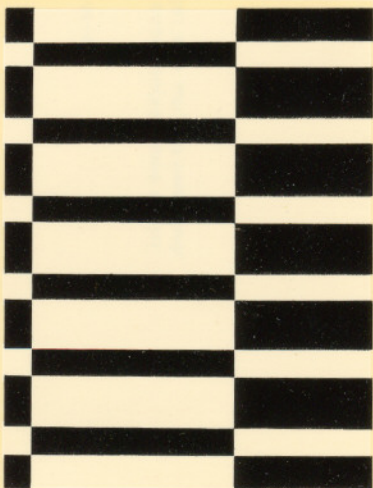
USA
USA



USA



USA-150



Quick Page Finder

1 2 3 4 5 6 7 8 9 0

1 2 3 4 5 6 7 8 9 0



USA
NA
USAF



USA



UNITED STATES

