



MODEL PRODUCTS CORPORATION
128 Groesbeck Highway
Mount Clemens, Mich. 48043

NIKE-PATRIOT

0849

AN ADULT SHALL SUPERVISE EACH FLYING MODEL ROCKET LAUNCH

Model Products Corporation's NIKE-PATRIOT model rocket kit utilizes a real breakthrough in the design of precision plastic parts. This model rocket uses a combination of 35 millimeter fiber body tube and precision-molded polystyrene parts to achieve ease of assembly and precision flying characteristics. There is no balsa wood in the kit. The 18 x 70 millimeter engine mount has been designed expressly for this fin assembly and consists of two molded plastic rings which hold the T-19 fiber engine mount tube and the wire engine clip. This engine mount snaps together and is glued into the fin assembly with styrene cement.

WARNING!

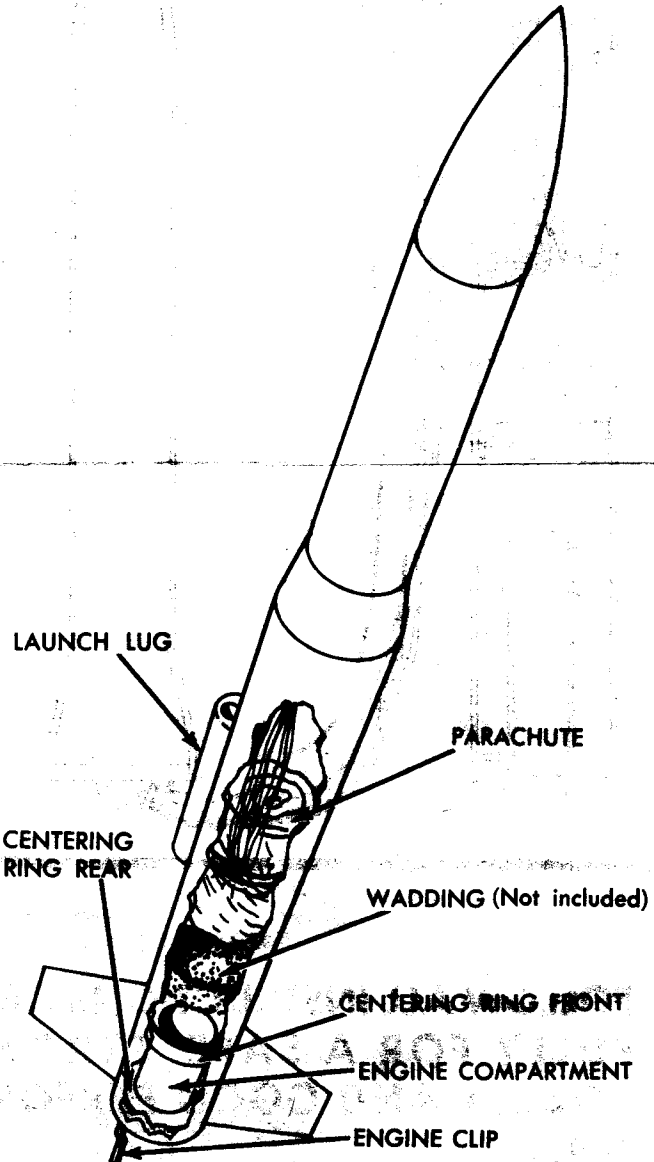
A flying model rocket is a scientifically designed educational model . . . NOT A TOY! If misused it can be dangerous. It is capable of attaining speeds up to 300 mph. It should be used only as instructed, and treated with care and respect.

Build this kit only as shown. Do not attempt to alter the design in any way. Each kit was designed to give maximum stability, and any alteration or variation of the rocket design could make it unsafe.

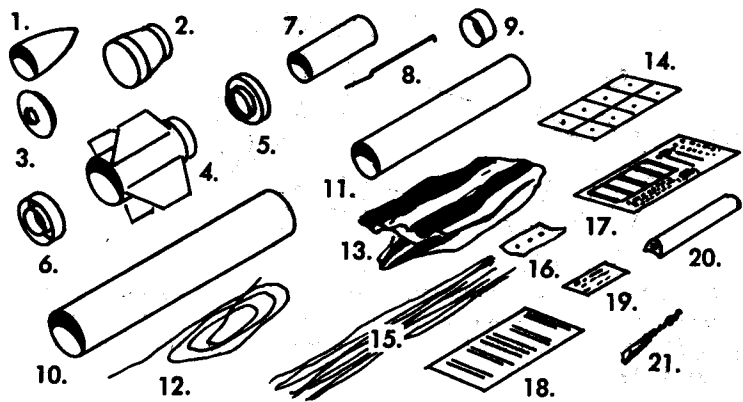
Solid propellant Rocket Reaction Engines are specifically designed for the sole purpose of propelling model rocket vehicles. They are scientifically designed, produced on automatic machinery, and subjected to statistical quality control tests. It is very important, however, that caution be exercised in their use. All instructions must be read thoroughly first and followed completely. Model rocket engines are designed for one purpose only. They are not toys—and their misuse must be absolutely avoided. Model rocketry has proven itself to be as safe as any other hobby, when common sense codes are used.

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 flying rockets. Look for our new models appearing on your dealer's shelves soon.

Before you begin building, look over the instructions carefully. Following the procedure given test fit the parts without gluing. This way you will be more familiar with the location of parts when it becomes time to use glue. The parts list will acquaint you with the pieces in the kit.

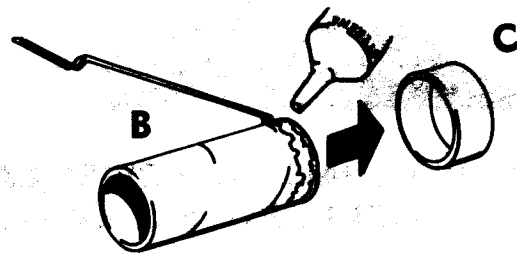
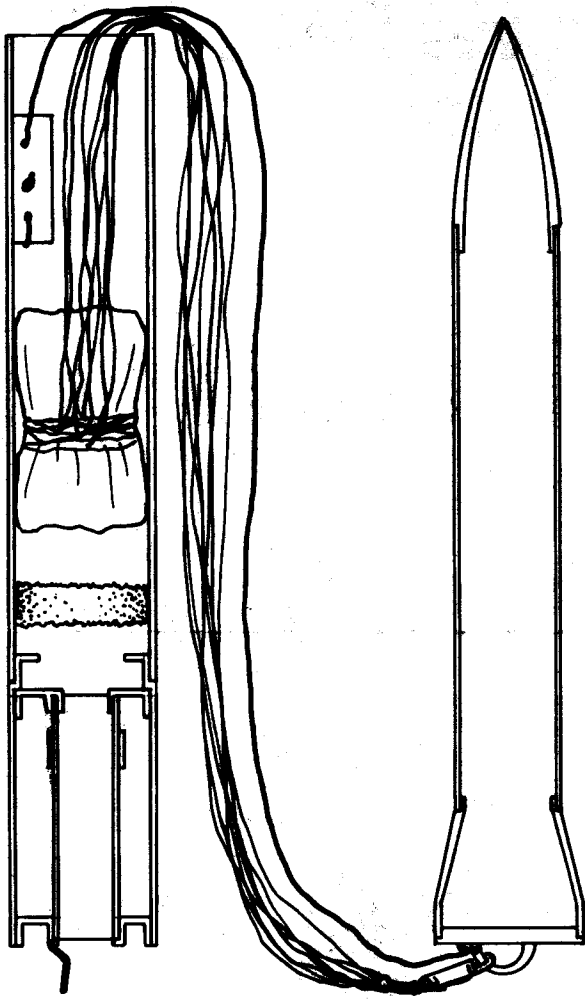


- RECOMMENDED TOOLS FOR ROCKET BUILDING:**
- Modeling Knife
 - Scissors
 - Styrene Cement (Tube)
 - Extra strong white glue
 - Ball Point Pen Or Pencil
 - Fine Grit Sandpaper
 - Paint In Desired Colors

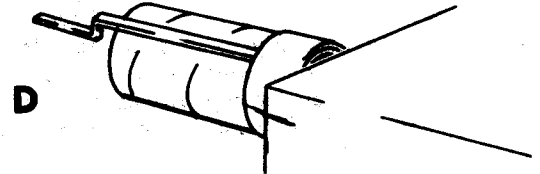


PARTS LIST

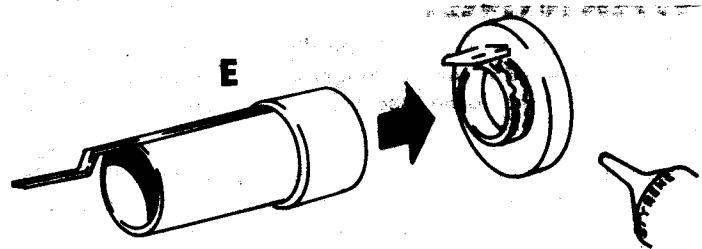
- | | |
|-----------------------------|-----------------------------|
| 1. NOSE CONE | 11. BODY TUBE 25 MILLIMETER |
| 2. COUPLER | 12. SHOCK CORD |
| 3. COUPLER PLUG | 13. PARACHUTE |
| 4. FIN ASSEMBLY | 14. SHROUD TABS (8) |
| 5. CENTERING RING FRONT | 15. SHROUDS (8) |
| 6. CENTERING RING REAR | 16. SHOCK MOUNT |
| 7. ENGINE COMPARTMENT | 17. DECAL |
| 8. ENGINE CLIP | 18. COUNT DOWN CARD |
| 9. ENGINE CLIP RETAINER | 19. ADDRESS LABEL |
| 10. BODY TUBE 35 MILLIMETER | 20. LAUNCH LUG |
| | 21. SNAP SWIVEL |



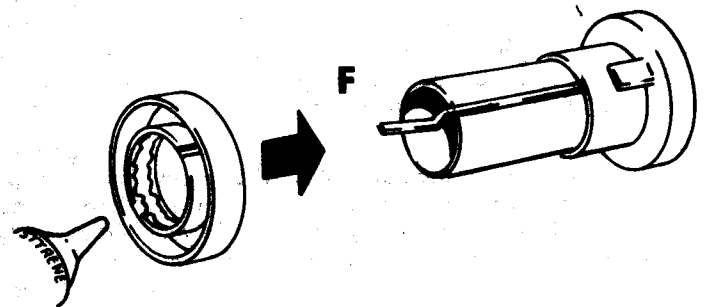
Insert the engine clip as shown (B). Apply styrene cement around the end of the engine compartment and start to insert it into the engine clip retainer (C).



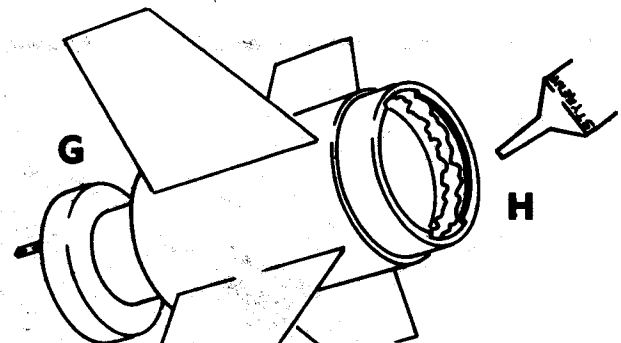
Place engine clip retainer against a table or similar solid object and push the engine compartment into it. Push until the ends are flush (D).



Trim flash from all plastic parts, and test fit before cementing. Apply styrene cement around the flange on the forward centering ring as shown. Push the engine compartment onto this flange, making sure the engine clip and engine clip retainer are under the tab (E).



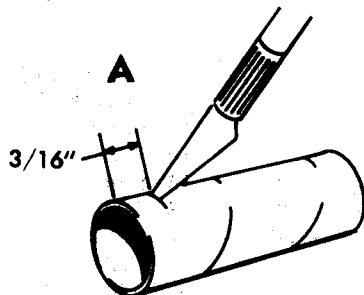
Apply styrene cement to the inside of the rear centering ring and push onto the rear of the engine compartment as shown. Be sure the rear centering ring is in the position shown, and the engine clip lines up with the slot in the centering ring (F).



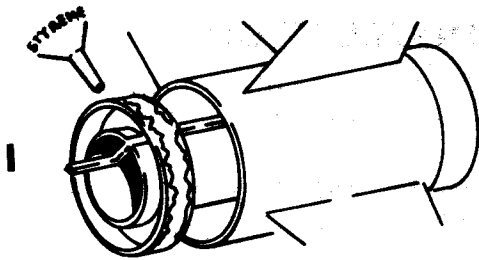
Insert the engine compartment assembly part way into the one piece fin assembly. Make sure the engine clip is to the rear (G). Apply styrene cement to the inside of the forward end of the fin assembly (H).

FOLLOW ALL INSTRUCTIONS CAREFULLY FOR A SAFE, STRONG, ROCKET AND GOOD PERFORMANCE.

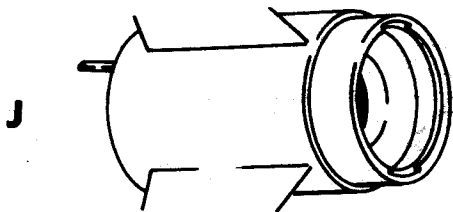
Sand the engine compartment so that the engine clip retainer slides easily over it (A). Also sand the body tube for better adhesion of paint and cement.



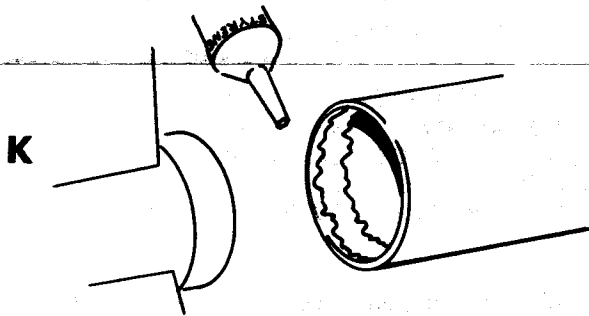
Cut a slit 1/8" long, 3/16" from the end of engine compartment (A).



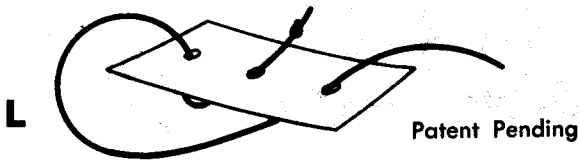
Apply styrene cement around the rear centering ring, and push the engine compartment assembly all the way into the fin. Wipe off excess cement (I).



The engine compartment/fin assembly should look like this (J).

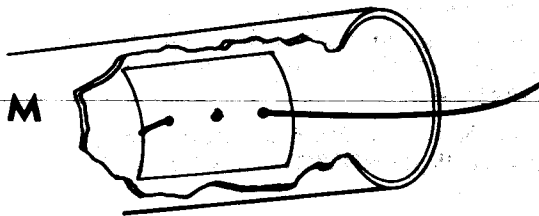


Apply styrene cement to the inside of one end of the body tube. Push this end onto the fin assembly. Make sure it is straight and hold for a minute until cement starts to harden (K).



Patent Pending

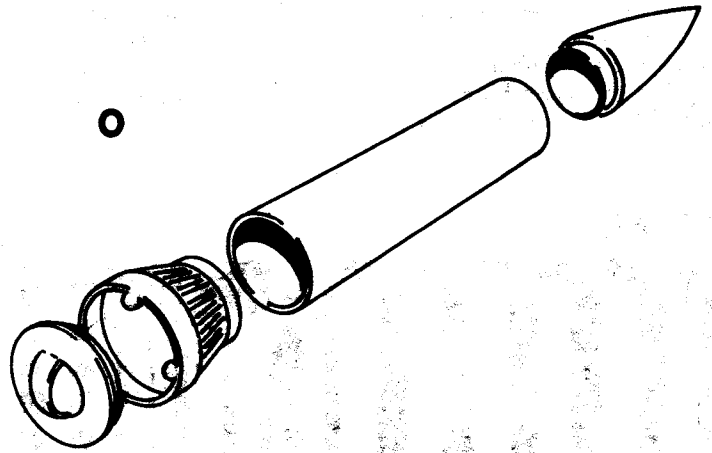
Lace shock cord through shock mount as shown (L).



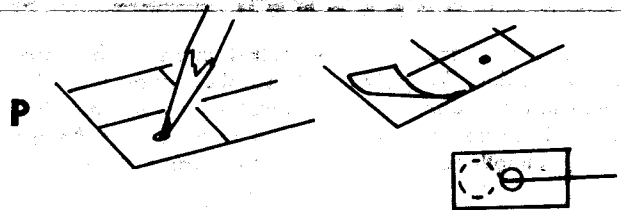
Use white glue to glue shock mount into the body tube. Glue shock mount about 1" from the open end. Make sure the shock mount is flat against the inside wall so that the parachute cannot get caught upon ejection (M).



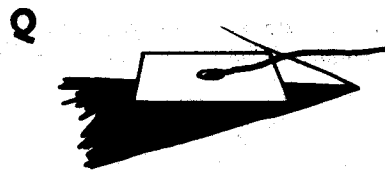
Sand the area where the launch lug is to be attached, through the plastic coating right down to the cardboard of the body tube. Sand the side of the launch lug, that will attach to the body tube, lightly. Draw a straight line on the body tube parallel to the center line of the body tube. Styrene cement the launch lug along this line with the forward end about 3 1/2" from the forward end of the body tube. Make sure the launch lug is perfectly straight, and does not line up with any fins (N).



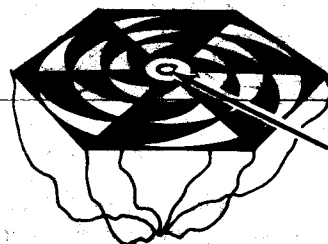
Styrene cement the coupler plug into the coupler, and styrene cement this unit into the 25 millimeter body tube. Next styrene cement the nose cone into the open end of the 25 millimeter body tube (O).



Cut parachute to shape. Punch out hole in shroud tab. Remove paper backing and thread one end of shroud line through hole. Curl shroud line under tab (P).

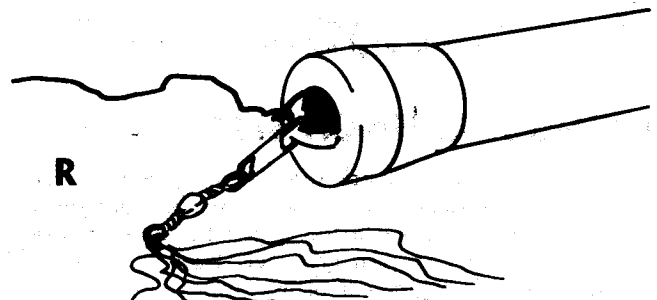


Place shroud tab on top of chute. Repeat for all corners (Q).



Punch several pin holes in top of chute to let trapped air escape when packing chute.

Parachute shown completed.

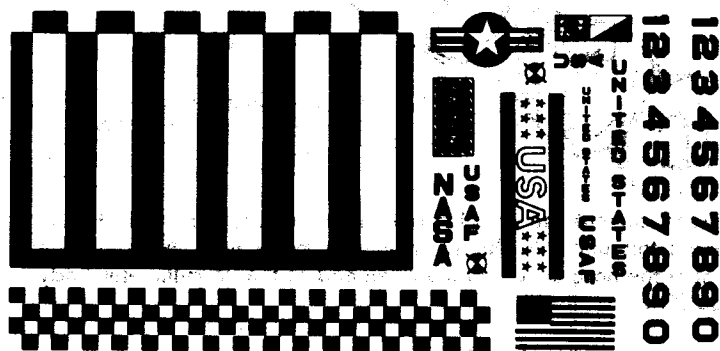


Tie shock cord to rear of the coupler plug with several knots. Tie shroud lines to snap swivel and hook snap swivel to rear of coupler plug (R).

PAINTING

Before painting be sure the whole body tube has been sanded. Use bright colors such as white, red, orange, etc., for easy spotting. Avoid runs and bubbles, as they may alter the flight characteristics. Peel the paper backing from the address label and apply to body tube after paint is dry.

DECALS



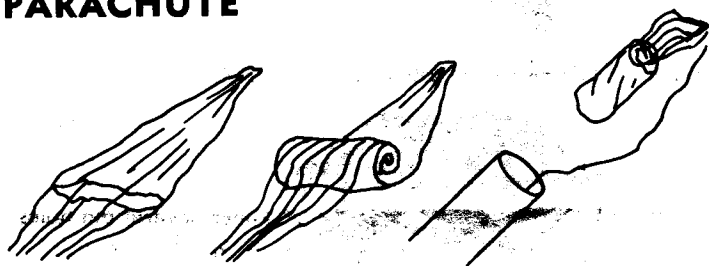
Get decal ideas from the box your rocket came in, but any combination is possible. To apply decals, cut them apart individually. Cut close to the designs, then dip in water for a few minutes. Next slide it off the paper as you apply it to the rocket. Before the decals dry, smooth out any bubbles with a damp cloth.

ENGINE SELECTION

For your first flights with the NIKE-PATRIOT we recommend the B6-4. After you have become acquainted with rocket flight you may use the C6-4 engines. Use all engines with extreme caution.

The engine should not be installed until you are ready to launch. Make sure the engine is held firmly in place with the engine clip.

PARACHUTE



Insert the yellow flame proof wadding (included in the MPC engine pack) into the body tube, pushing it down toward the engine block. Insert the smoke cloud tissue. Roll the parachute by laying it on a flat surface as shown. Roll it from the end with the shrouds toward the center. Insert the rolled chute into the body tube and join two sections of the rocket.

SELECTING A LAUNCH SITE

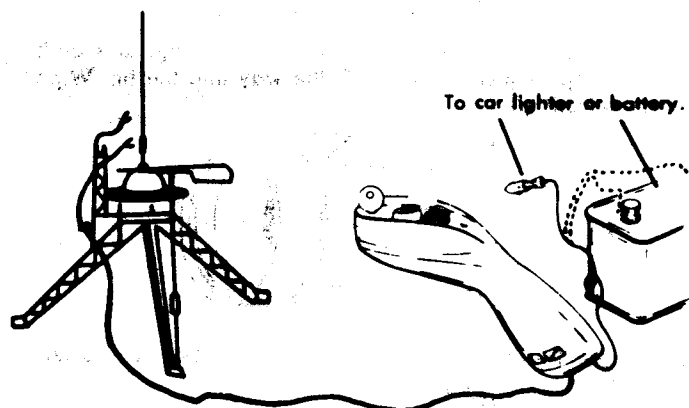
Choose a level area as your launch site. Clear the area under the launch pad of dry grass, and other flammable materials. Your launch site should be clear of trees, high buildings, power lines, and roads and freeways. An area 500' by 500' minimum is recommended for safe flight and recovery.

For a good flight, each and every time, use an MPC LUNAR LECTRIC LAUNCH PAD, and LAUNCH CONTROL to fly your model rocket.

LAUNCH INSTRUCTIONS

All model rockets must be launched electrically, using the MPC LUNAR-LECTRIC or similar launching system. Check with your hobby dealer.

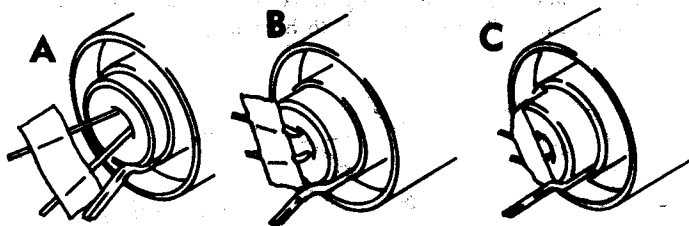
IMPORTANT: All model rockets must be launched from a launch rod at least 36 inches long.



RECOMMENDED BATTERIES

EVEREADY #732 LANTERN	MALLORY M904
EVEREADY #1463 HOT SHOT	BRIGHT STAR #164 OR #187
MARATHON #926 OR 904	BURGESS TW2 OR S461
RAY-O-VAC #904 OR 922	BURGESS 4F6H OR 2G8H

Before approaching launch pad, remove safety key from launch control handle, and disconnect leads from power source.



Approach launch pad with model, engine, and Ignitor. Peel paper backing from taped Ignitor, and insert into nozzle as far as it will go (A). Bend Ignitor over against engine (B). Press tape down onto engine to hold Ignitor in place (C). Insert engine into engine compartment (with nozzle outward) until engine is locked in place, with engine clip.

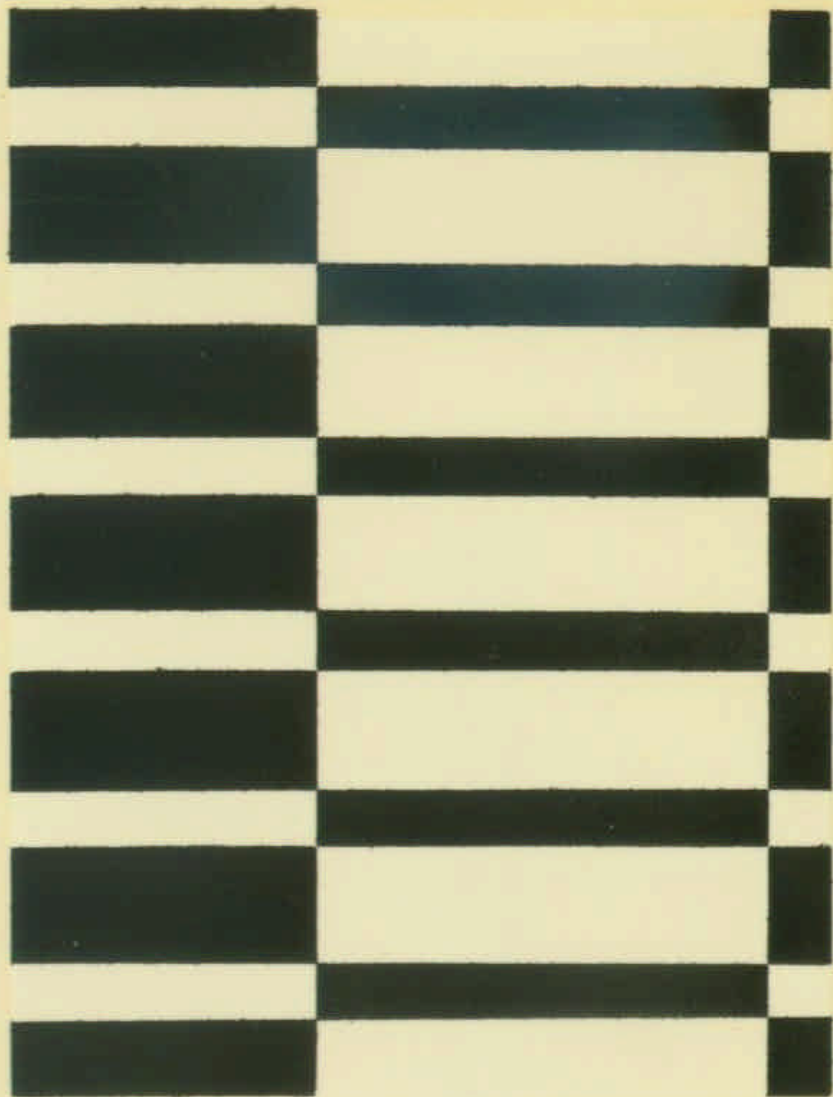
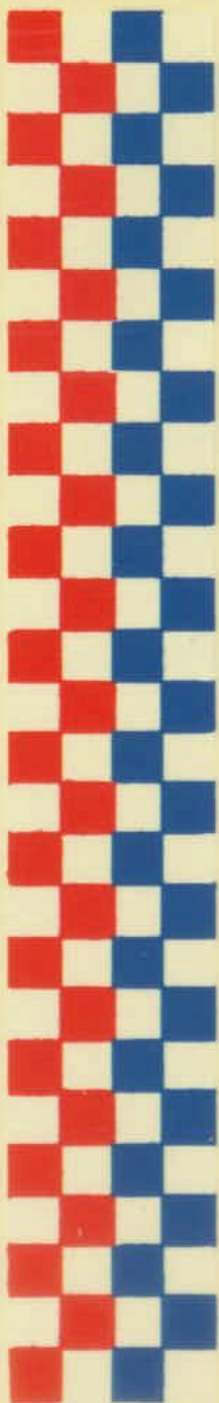
DO NOT USE FUSE OF ANY KIND, AS IT IS DANGEROUS AND ILLEGAL

WITH ADULT SUPERVISION

Lower rocket onto the launch rod by sliding the launch lug over rod. Attach one micro clip to each of the Ignitor leads extending from the engine. Retreat to launch control and give an audible warning to persons in the area that a countdown is about to begin. Connect leads to power source, insert safety key in the LUNAR-LECTRIC launch control, or whatever launch control you're using. Begin countdown procedure from countdown card, included in every MPC model rocket kit.

In the event that engines are not available in your area, take advantage of our three engine package by sending \$1.25 to MODEL PRODUCTS CORP., 126 Groesbeck, Mt. Clemens, Michigan 48043.

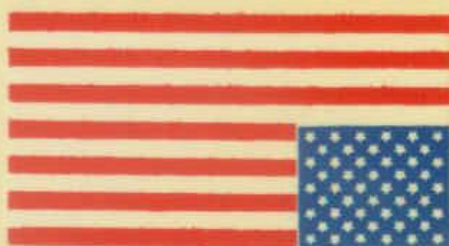
If you are a minor your order must be accompanied with a note from parent or guardian.



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