MODEL PRODUCTS
126 GROESBECK HIGHWAY
MOUNT CLEMENS, MICHIGAN 48043

YANKEE I

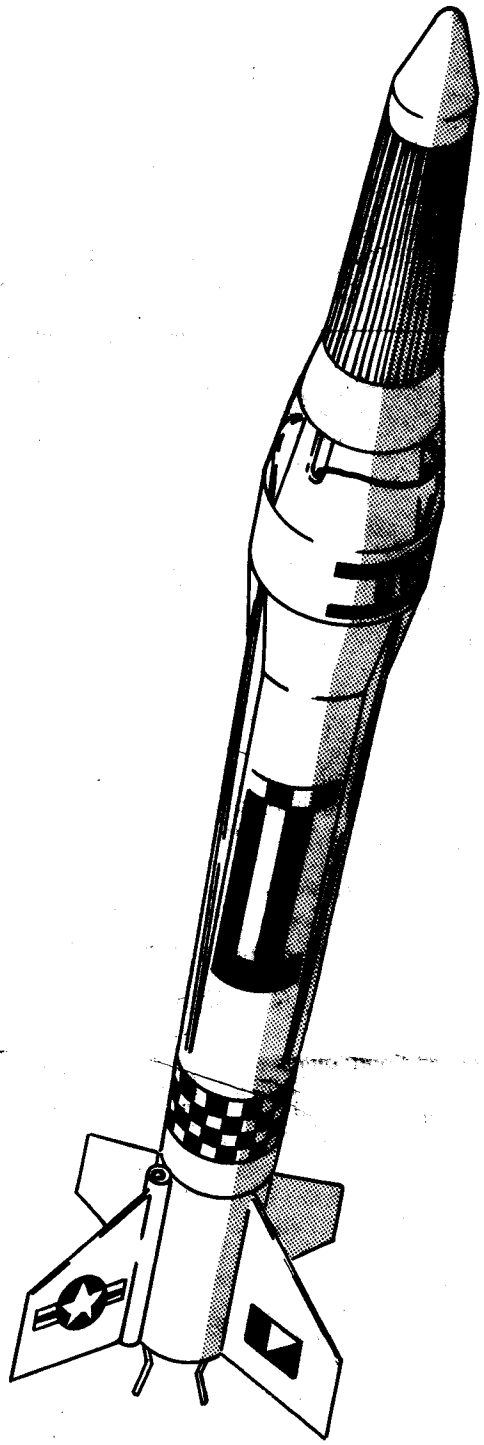
3-0300

The YANKEE I is a ready to fly model rocket. All you have to do is assemble the parachute, set up your launch system and launch. The YANKEE I has the unique feature of being able to replace the center tube and fin assembly in the event that they are damaged. Patent Pending

The YANKEE I has been designed and developed to give you a straight, high flight every time. If all the launch instructions are followed, and safety precautions are taken you will be able to enjoy many flights from your YANKEE I.

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 on the flying field. Look for our new models on your dealer's shelves.

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



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.

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.

ENGINE SELECTION

B6-4
MODEL PRODUCTS CORP.

For your first flights with the YANKEE I we recommend the B6-4. After you have become acquainted with rocket flight you may use the C series engines.

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

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.

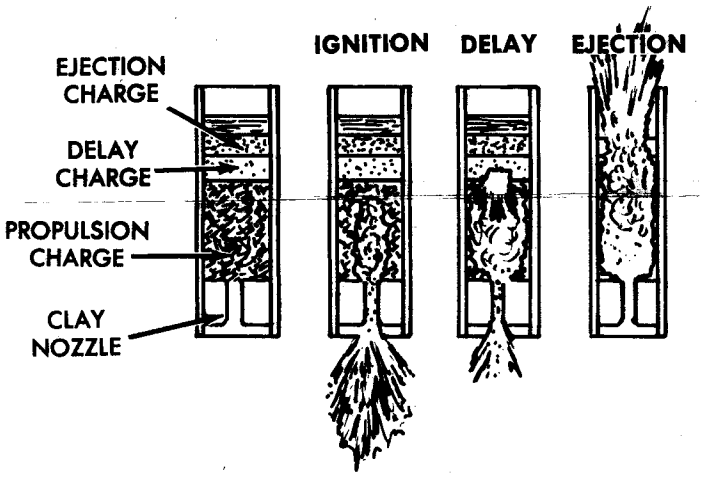
If you are a minor your order must be accompanied with a note from parent or guardian.

WHAT IS MODEL ROCKETRY?

Model Rocketry is an international aerospace sport, a space age educational tool, a technological recreation, a hobby. It is recognized as such by many organizations: NASA, U.S. Air Force, the National Fire Protection Association, National Science Teacher's Association, American Institute of Aeronautics and Astronautics, National Aeronautic Association, the 51-Nation Federal Aeronautique Internationale, and various U.S. Government agencies.

WHEN DID MODEL ROCKETRY START?

Model Rocketry was born with the space age in 1957. Since that time, nearly 15,000,000 model rockets have been flown in the United States. 1957 also saw the start of the National Association of Rocketry (NAR), a non-profit organization formed for the purpose of guiding and encouraging the healthy growth of model rocketry as a hobby-sport throughout the United States.



HOW DO ENGINES OPERATE?

The rocket engine is ignited electrically. An electrical current passes through the igniter, igniting the solid propellant, creating gas pressure inside the engine. These gases, passing through the rocket nozzle, lift the rocket off the launch pad propelling it upward into a flight path. After the propellant has been expended, a delay charge is ignited, allowing the rocket to coast to its highest point. Following this, an ejection charge is ignited, forcing pressure forward. This pressure blows off the nose cone and deploys the recovery device.

FLIGHT

The engine of a model rocket is only the propulsion unit, and although it plays a small part in the stability of a rocket, it is not the main factor. Flight stability must be achieved for proper performance of your rocket.

The launch rod and launch lug are two extremely important parts needed for stable flight. The launch rod guides the rocket during the first few moments of flight and is the rockets guidance system until sufficient speed has been obtained for the fins to come into effect. By the time the rocket has left the launch rod it has reached enough speed for the fins to take over guidance. The launch lug must be fastened securely to the rocket for this to be accomplished.

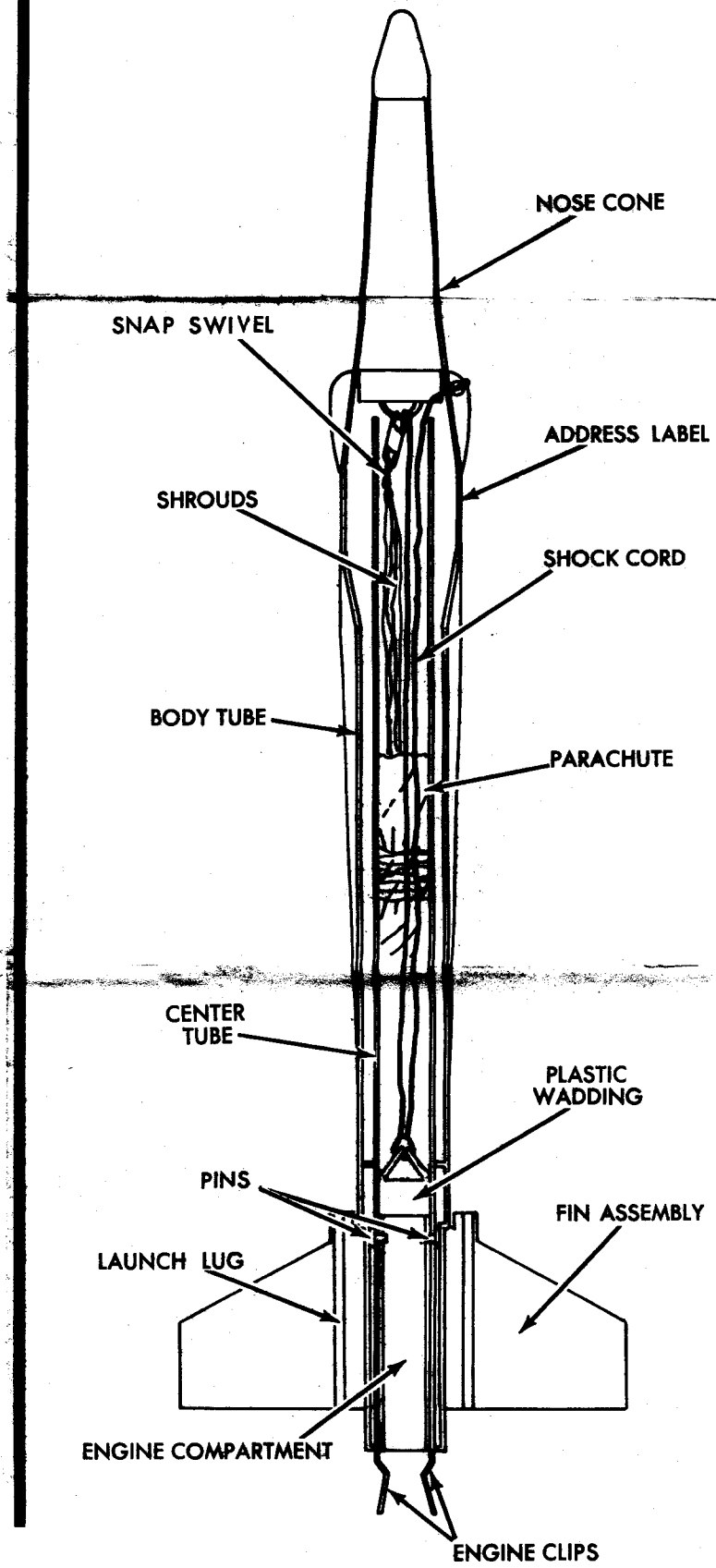
The length of the rocket in relation to the weight and size of the fins, are factors that determine stable flight. All MPC model rockets have been designed with this in mind, so you will always have a good, straight flight.

HOW SAFE IS MODEL ROCKETRY?

When common sense codes are followed, model rocketry has proven itself to be as safe as any other hobby and actually safer than Little League Baseball, model airplanes and swimming. It is so safe that the Insurance Company of North America provides public liability and property damage insurance in the amount of $3,000,000 to all members of the National Association of Rocketry (NAR) including minors. Since the insurance program started in 1964, there have been no claims paid against this INA insurance policy.

WHAT IS A MODEL ROCKET?

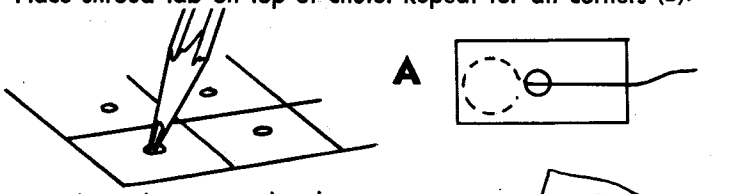
Model Rockets are made of paper, balsa wood, plastic and other materials having high strength and low weight. Most model rockets weigh only a very few ounces. They use a factory-loaded, pre-packaged solid propellant rocket engine of high reliability. There is no handling or mixing of chemicals or explosives.



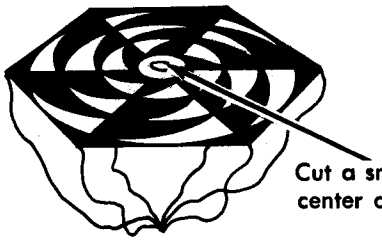
PARACHUTE

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

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

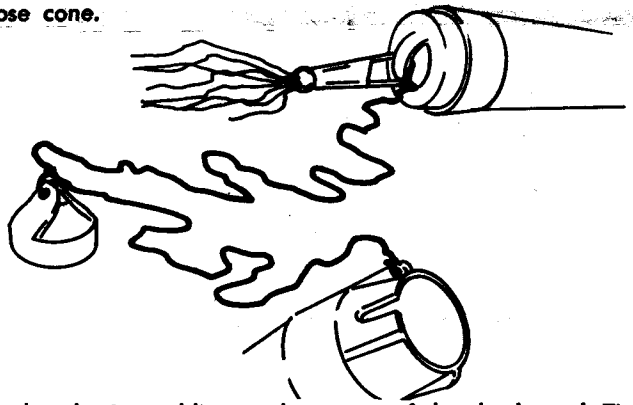


Parachute shown completed.



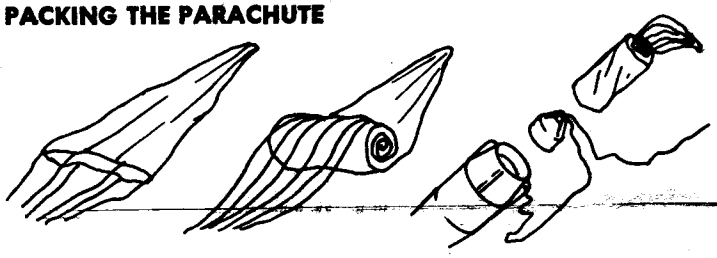
Cut a small hole in the center of the parachute.

Tie the shroud lines to the snap swivel and attach snap swivel to nose cone.



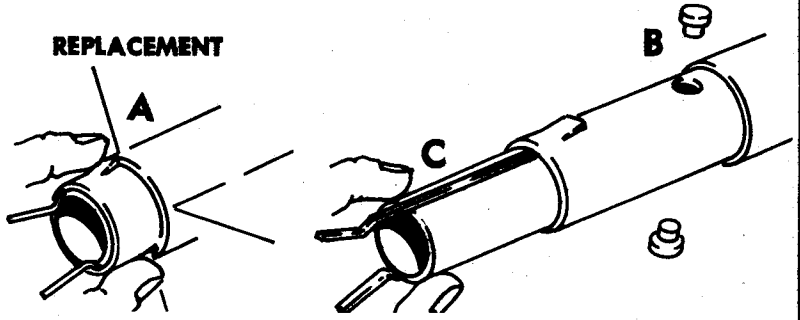
Tie the plastic wadding to the center of the shock cord. Tie one end of the shock cord to the back of the nose cone. Tie the other end of the shock cord to the tab on the top of the body tube. When packing the chute pass the shock cord from the tab through the notch in the body tube.

PACKING THE PARACHUTE



To pack the parachute, lay it on a flat surface as shown. Roll it from the bottom to the tip so that the shrouds are rolled up inside. Insert the plastic wadding, and then insert the rolled up parachute. A small amount of talcum powder will keep the chute from sticking together. Join the nose cone to the body tube.

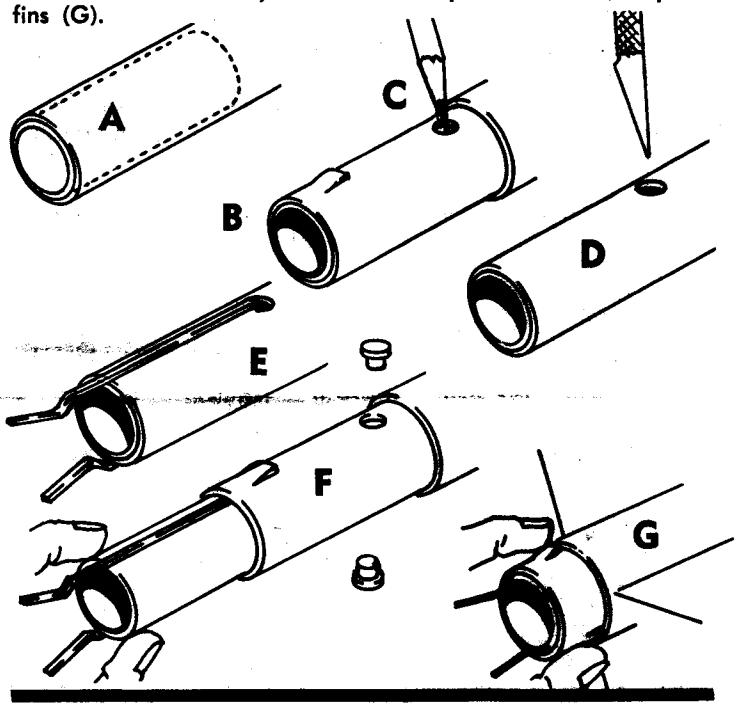
REPLACEMENT



To remove fins, press in tabs at the rear of the rocket and slide fins off.

To remove center tube, remove the fins (A). Next remove the small pins in the sides of the rocket (B). Pull the center tube out (C).

To make a new center tube, use a 12" 20mm tube, and a 2⅝" engine compartment, available from your model rocket dealer. Glue the engine compartment into the 10" tube so that the ends are flush (A). Push this body tube into the main body tube, with the engine compartment to the rear. Make sure the center tube is even with the end of the body tube (B). Mark the center tube through the holes and remove the tube (C). Cut ¼" holes on these marks (D). Put the engine clips in the holes (E). Slide the tube into the main body tube and insert pins in holes (F). Replace fins (G).



DECALS

Get decal ideas from the box your rocket came in. To apply decals, cut them apart individually, cut close to the designs, then dip in water for a few minutes. Next slide it off of the paper as you apply it to your rocket. Before the decals dry, smooth out any bubbles with a damp cloth. Peel paper backing from address label and apply to body tube.

PREPARATION TIPS

When preparing or "prepping" your MPC model rocket for flight, keep in mind these helpful tips. They'll assist in making sure that everything works properly.

1. Make sure that the engine is securely installed! If the engine is not seated in the engine clips, the ejection charge may eject the engine instead of the wadding and recovery device. If this happens, your model may plummet to the ground and be destroyed.
2. Install the igniter according to instructions, but do it only on the flying field just before you are ready to put the model on the launcher. If you don't install the igniter correctly, it cannot work properly and the engine will not be ignited. Although MPC igniters are designed to be ignited only by electrical means, you should always follow the rules of the professional rocketeers who consider any rocket engine with an igniter installed to be ready to fire at any time.
3. Your MPC model will move through the air at very high speeds. Its fins must be on strong and straight in order to insure that your model flies properly. Always check for undamaged fins, broken fins, and crooked fins. Don't try to fly a model rocket with a cracked, broken, or crooked fin.
4. Make sure that the nose cone will slip on and off the model easily and that the shock cord or a shroud line is not wedged between the nose cone tenon and the body tube. If the nose cone is jammed and cannot come off, the recovery device cannot deploy.
5. Have somebody else check your model preparations before you fly the model. You may have forgotten something. Two heads are better than one, and you may have overlooked something because of excitement.

SELECTING A LAUNCH SITE

To begin your plans for launching your model rocket you must first select a launch site. A quick trip around your local area will give you many choices for a launch site. The local school athletic field is usually the largest open field available in many communities. Choose a field that has few trees. Like Charlie Brown's kite, trees also like to eat model rockets. The field should be free of high buildings, and power lines.

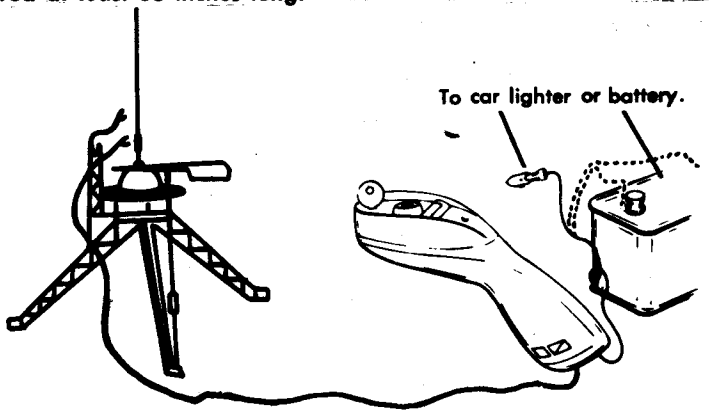
NEVER ATTEMPT TO RECOVER A MODEL ROCKET FROM A POWER LINE. Shopping center parking lots cannot be used, unless authorization has been obtained. Do not choose a launch site near an airport.

Choose a level area as your launch site. Clear the area under the launch pad of dry grass, and other flammable materials. An area 500' by 500' minimum is recommended for safe flight and recovery.

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.

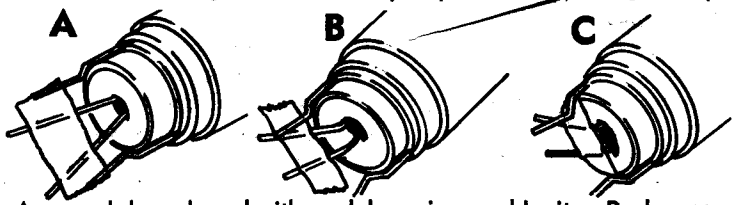


RECOMMENDED BATTERIES

Eveready #732 Lantern	Mallory M904
Eveready #1463 Hot Shot	Bright Star #146 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.

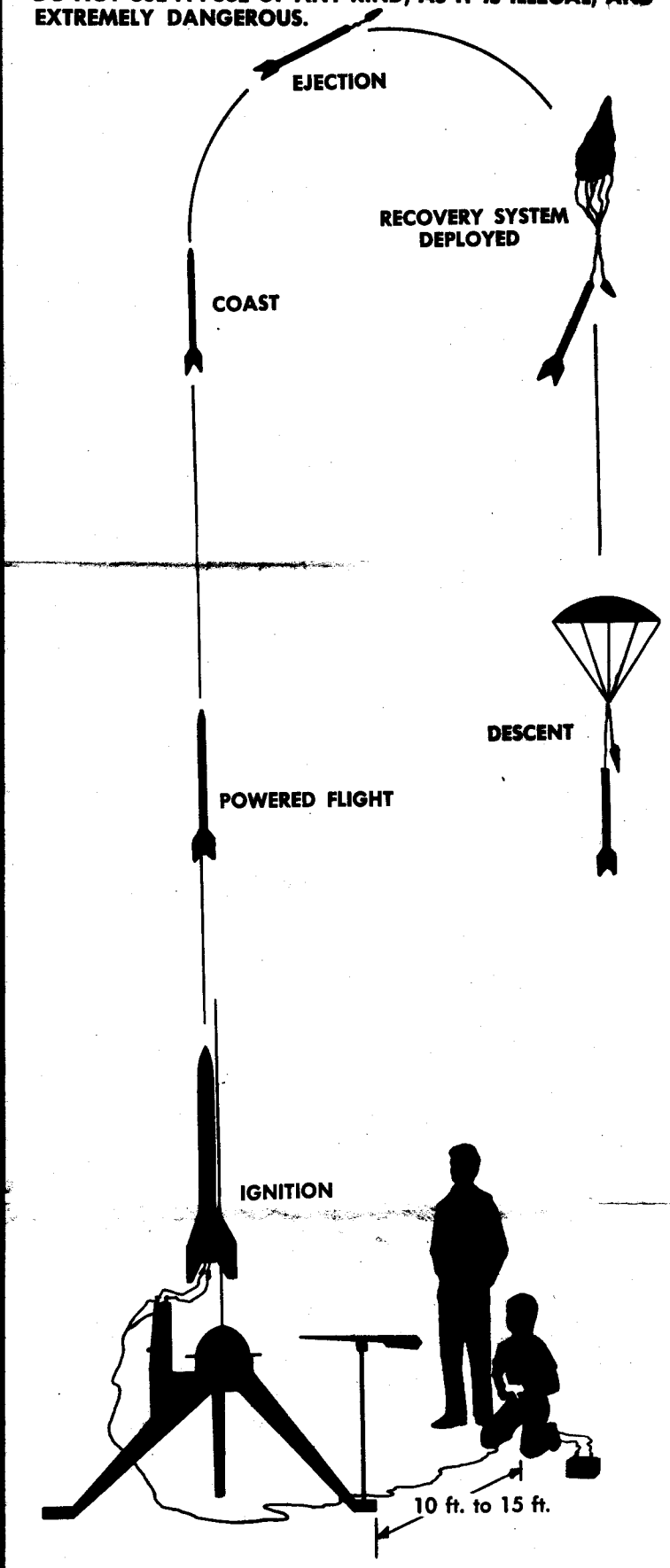
The engine should not be installed until you are ready to launch. Make sure the engine is held firmly in place with the engine clips.



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 clips.

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.

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



MAKE SURE WHEN IGNITER IS INSTALLED THAT THE NICHROME WIRES ARE NOT MAKING CONTACT WITH EACH OTHER, IN THE ENGINE. THE TWO MICRO CLIPS CANNOT BE TOUCHING EACH OTHER, OR THE LAUNCH ROD. ANY OF THESE FACTORS WILL CAUSE A SHORT CIRCUIT.