

MRC WILDFIRE

**Stands over
29" (high)**

- Computer designed for stable high altitude flights
- Payload capability
- Hi-impact nose cone and fins for long life
- Easy assembly
- Aerodynamically advanced design

For intermediate modelers

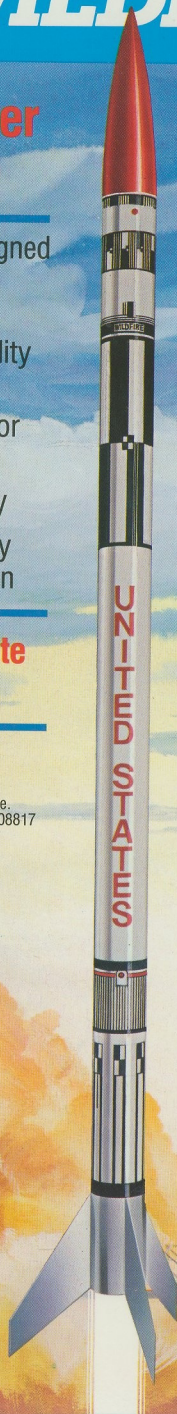


Model Rectifier Corporation

2500 Woodbridge Ave.
Edison, New Jersey 08817

Length: 29.33 in. (745mm)
Body Diameter: .976 in. (24.8mm)
Weight: 1.81 oz. (51.4 grams)
Recommended Engine
Sizes: A8-3 (first flight)
B4-4, B6-4, C6-3, C6-5

Recommended for ages 10 to adult. Adult supervision recommended for ages 12 years and under. Keep out of reach of small children.



WILDFIRE

KIT NO. TR 107

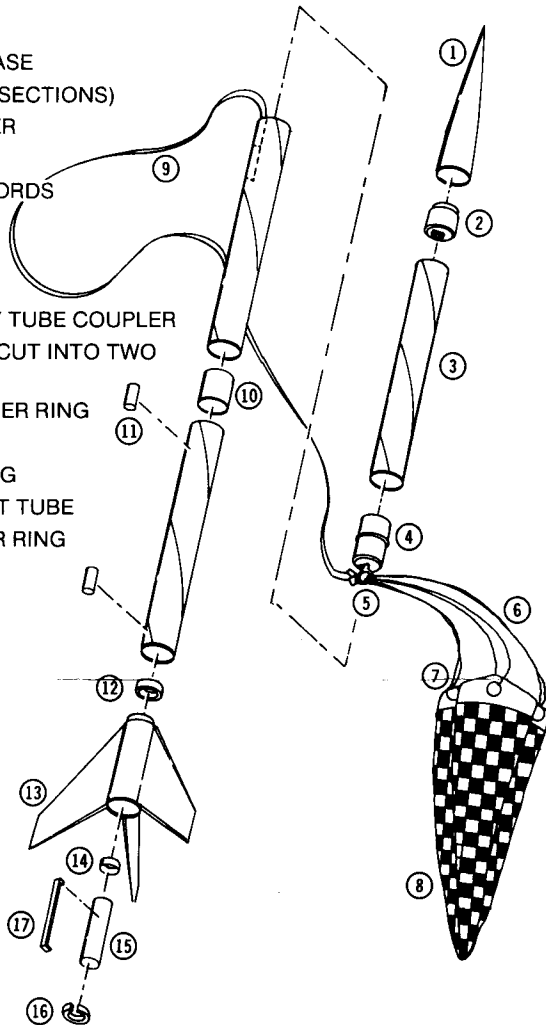
SKILL LEVEL: DESIGNED FOR
INTERMEDIATE MODELERS



MODEL RECTIFIER CORPORATION
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PARTS IDENTIFICATION

1. NOSE CONE
2. NOSE CONE BASE
3. BODY TUBE (3 SECTIONS)
4. SOLID COUPLER
5. SCREW EYE
6. PARACHUTE CORDS
7. TAPE DISCS
8. PARACHUTE
9. SHOCK CORD
10. HOLLOW BODY TUBE COUPLER
11. LAUNCH LUG (CUT INTO TWO PIECES)
12. ENGINE ADAPTER RING
13. FIN UNIT
14. RETAINING RING
15. ENGINE MOUNT TUBE
16. SPLIT ADAPTER RING
17. ENGINE HOOK



SAFETY INSTRUCTIONS

For the safe and reliable performance of your model rocket
PLEASE NOTE:

1. That model rockets are not "toys" - that they are capable of causing personal injury to you and to others as well as property damage.
2. That you and you alone are responsible for the safe operation of your rocket.
3. That you must properly build and operate your model with a clear sense of that responsibility; that means taking no chances or risks which might endanger yourself or others.
4. That you read and observe the rules of the Model Rocketry Safety Code printed on the back of the cardboard insert included in your kit.

Remember, the thrill of rocketry lies in the safe construction of the rocket and in its careful operation. Make each launch a success and you will be proud of yourself and will really enjoy your hobby.

HELPFUL HINTS

Before building this kit gather the necessary tools and materials and read all instructions thoroughly. In addition, keep the following points in mind.

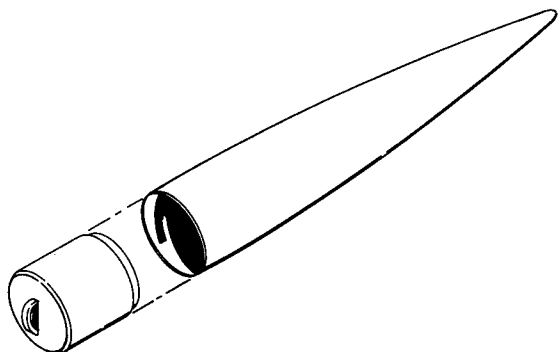
1. Read and understand each step and study the drawings before beginning any part in that step.
2. Always test fit the parts before assembling them. If they do not fit because they are too tight, sand them slightly. If they are too loose, build them up as described in the instructions.
3. Proper glue joints are vital for the safe operation of your model rocket. Use the recommended glues in the manner outlined by these instructions and by the glue manufacturer.

ITEMS REQUIRED FOR ASSEMBLY OF YOUR WILDFIRE

- | | |
|---------------------------------------|---|
| 1. Cotton swab on stick (like Q-tip™) | 7. Modeling Knife |
| 2. Pencil | 8. White Glue or Aliphatic Resin Glue (such as Titebond™) |
| 3. 400 grit sandpaper | 9. Instant Glue (Crazy Glue™) or Plastic Glue |
| 4. Scissors | 10. Enamel Paint |
| 5. Ruler | |
| 6. Modelers Paint Brush | |

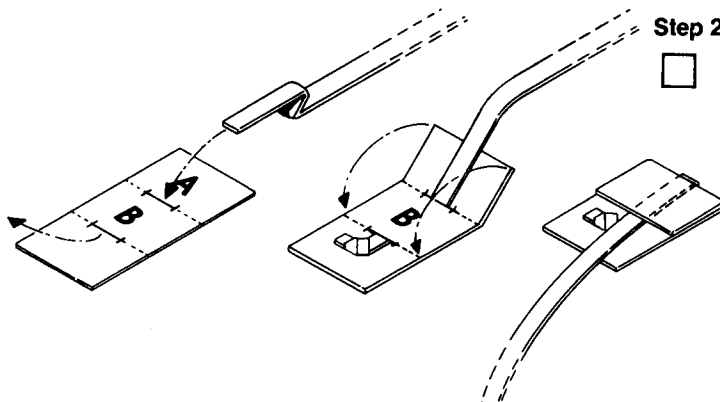
ASSEMBLY INSTRUCTIONS

Step 1

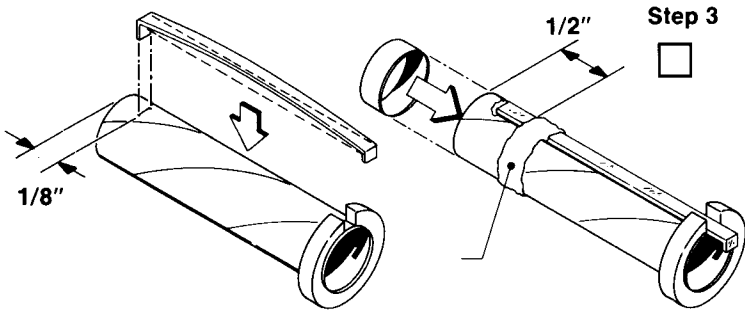


Using plastic cement or instant glue, glue the nose cone base to the nose cone. Wipe off excess glue and put aside to dry.

Step 2



Cut out the shock cord holder on page 3 of the instructions. After it has been cut out, make two slits with your modelers knife on two dotted lines. Do not make slits any wider than is marked by the dotted lines. Feed the shock cord through the two slits as indicated in the drawing and put a small knot at the end of the shock cord. Apply white glue to Section B and fold A onto B along the large dotted line. Allow to dry.

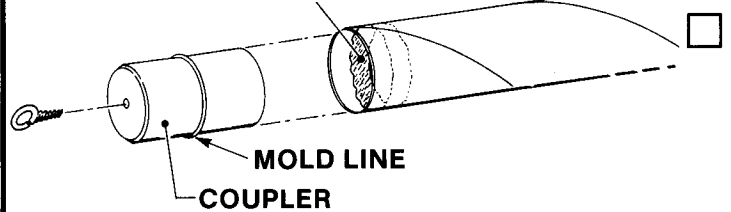


Step 3

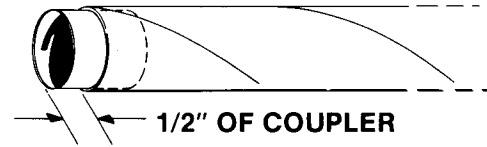
Take the split ring and glue it flush with one end of the engine mount tube with white glue. Cut a 1/8 of an inch slit in the tube at 1/4 of an inch away from the other end of the tube and directly in line with the gap in the split ring. Pick up the engine hook and note that the hook has one end larger than the other. Put a slight bend in the hook and insert the larger end of the hook into the slit as shown. Put a small amount of glue over the engine hook and slit and put a small ring of glue around the tube as well at 1/2 of an inch away from the end. Slide the retaining ring over the tube and the hook until the ring is 1/2 of an inch away from the end of the tube. Set this assembly aside to dry.

GLUE ON INSIDE OF TUBE

Step 6

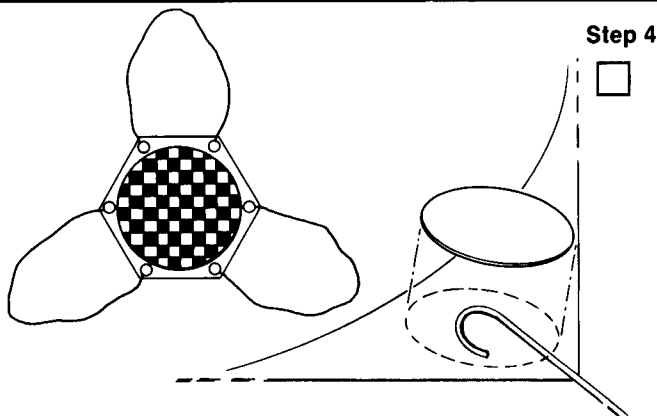


Take the screw eye and screw it into the base of the solid coupler. Apply a ring of glue to the inside of one end of a body tube and insert the solid coupler into the tube with the screw eye facing outwards. The mold line on the coupler should be even with the end of the body tube. Set this assembly aside to dry.



Step 7

Take the other two body tubes and the hollow body tube coupler. Apply a ring of glue to the inside of one end of a body tube. Insert one half of the coupler into the body tube. Be sure the coupler has been inserted evenly. Set this piece aside to dry for a short while.

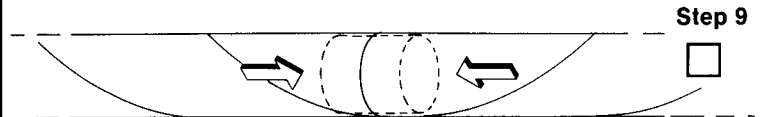


Step 4

Cut the parachute out along the dotted lines printed on the sheet. Take the bundle of parachute cord and cut it into 3 pieces of equal length, of about 24 inches each. Take one end of the parachute cord and bend it over for about 1/8 of an inch. Place this bent end on one of the circles drawn on the corner of the parachute and firmly press a self-adhesive tape disc over the end of the cord to hold the cord in place. Bend the other end of the parachute cord and tape it down to an adjacent corner of the parachute. Repeat this for the remaining two parachute cords.

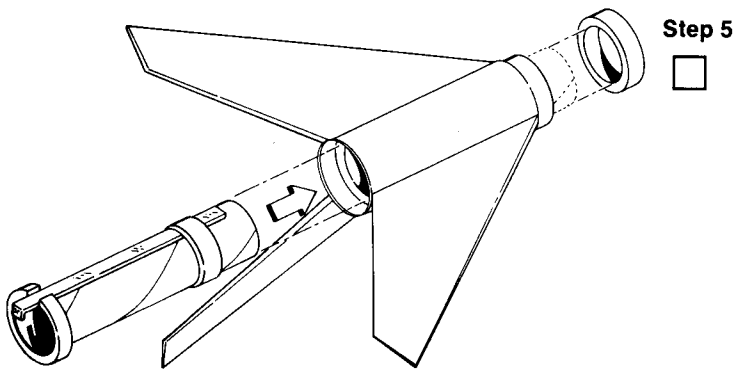
Step 8

Take the launch lug and cut it into two 5/8 of an inch pieces.



Step 9

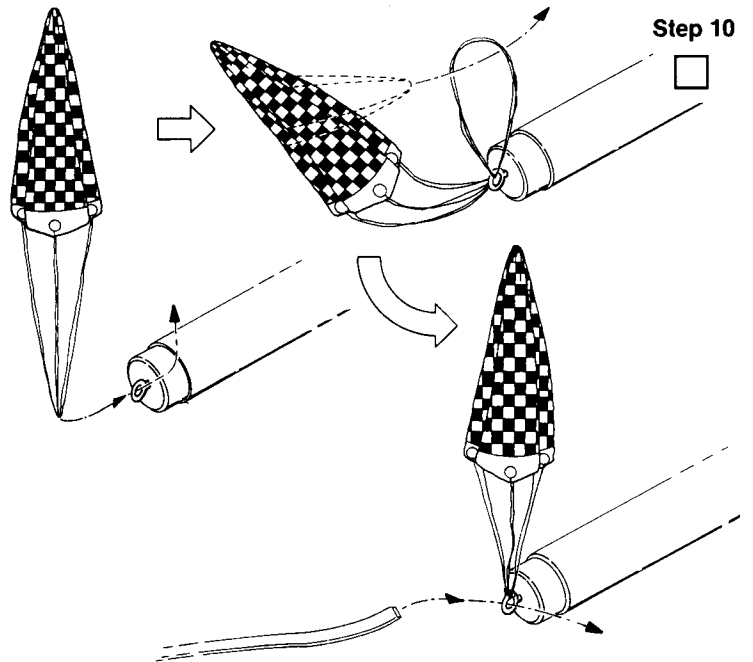
Apply a ring of glue to the inside of one end of the remaining unused body tube and attach it over the exposed part of the hollow body tube coupler and the two tubes now joined should meet flush and straight. Set this assembly aside to dry.



Step 5

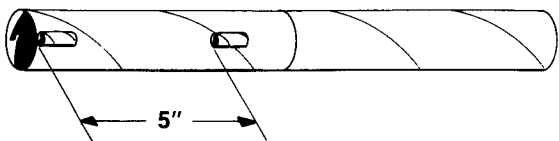
FIN SHAPE IS DIFFERENT THAN IN DIAGRAM

Add glue to the front and sides of the split adapter ring. Do not get glue on the engine hook. Slide the engine mount assembly into the fin assembly from the rear, position it so the engine hook is directly between two fins. Apply glue to the exposed front part of the engine mount and slide the engine adapter ring onto the engine mount tube. You may have to sand the inside of the ring to fit the engine mount tube. The ring should sit flush against the top of the fin unit, and keep the engine mount unit from moving forwards or backwards. The outer edge of the engine adapter ring should be even with the outer edge of the fin unit.



Step 10

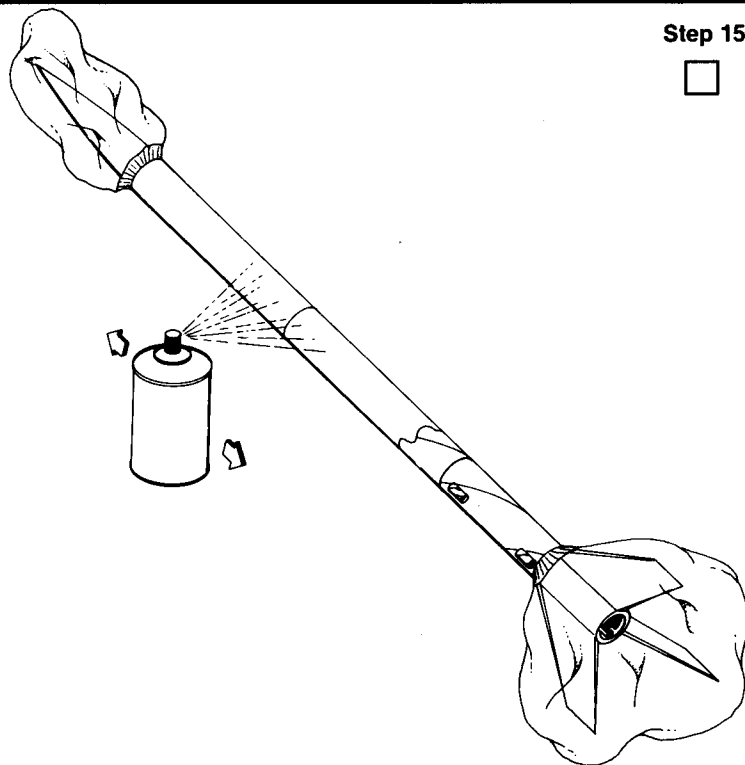
Hold the parachute by its center and pull the cords together evenly. Pass the cords through the screw eye and loop the cords around the payload section so that the parachute is firmly attached to the screw eye. Tie the free end of the shock cord to the screw eye with a double knot and put a drop of glue on the knot.



Step 11



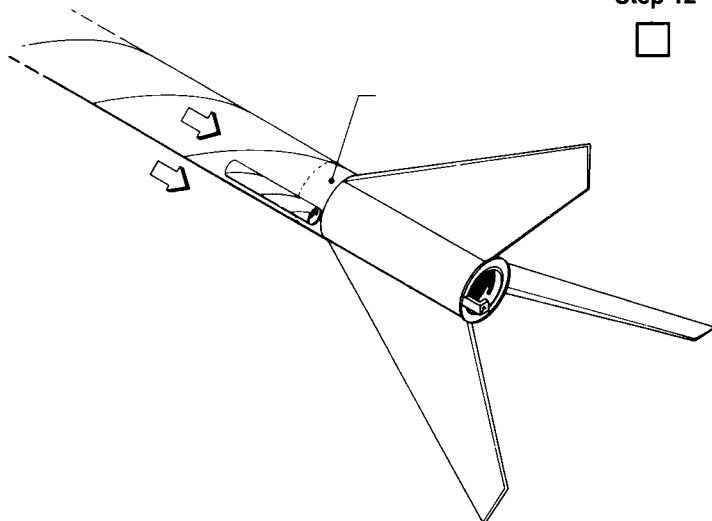
Make a straight line down the length of the joined body tubes about 6 inches from one end of the body tube. Gently clamp the body tube between two solid objects and use a ruler to make this line as straight as possible. Make a mark on this line 5 inches from the end of the tube. Glue one launch lug to the end of the tube on the line and glue the other lug so that the rear of the lug matches up with the 5 inch mark. Allow the lugs to dry for 1/2 hour then apply a line of glue to each side of the lugs for reinforcement.



Step 15



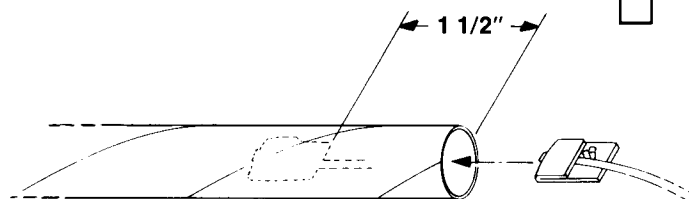
To prepare for painting, the shock cord, parachute and nose cone should be protected from paint overspray. It is best to paint the rocket body white.



Step 12



Apply a ring of glue to the inside of the large tube assembly at the end where one launch lug is mounted. Insert the completed fin unit into this end. The launch lugs and the engine hook should be on the same side for best results. Set the assembly aside to dry.



Step 13



Apply glue to a spot 1-1/2" inside the top of the body tube using a cotton swab. Press the shock cord mount onto the glue and hold it in place for a minute. Do not let the mount slide away from the position.

Step 16



The special MRC self-adhesive decals included in this kit can be instantly applied to the body tube after the paint has dried. Take your time in applying the decals because the glue on them is very strong and decals cannot be removed once applied.

To apply decals, remove individual decals from the sheet. Position the decal on the rocket lightly and carefully. Press the decal firmly onto the rocket, making sure the decal surface is evenly applied, with no bubbles or loose edges, by rubbing the surface with your fingernail. You may have to cut decals to fit around the launch lugs. Use the cardboard insert within polybag for decal location.

FOR SAFE LAUNCHES, YOU MUST FOLLOW THE ACCOMPANYING CHECKLIST EVERY TIME YOU USE YOUR MODEL ROCKET.

READ AND FOLLOW THE SAFETY WARNINGS ON THE CARDBOARD INSERT EACH TIME YOU USE YOUR MODEL ROCKET.

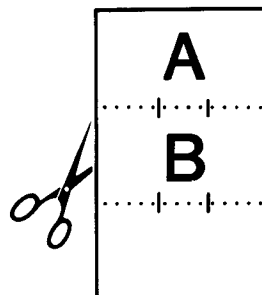
Step 14



The nose cone can be glued to the top of the hollow tube section if you are going to use it only for sport flying.

If you are going to use the Wildfire for carrying payloads, weigh the rocket after it has been painted and decaled, with wadding inserted but without the engine. Subtract the weight of the rocket from the maximum lift rating of the engine you wish to use. This figure yielded is the amount of payload your rocket can carry. For safe operation do not exceed the maximum lift rating of the engine.

When using the Wildfire to carry payloads, the nose cone can be held in place by using masking tape on the shoulder of the nose cone or on the inside of the body tube to hold it in place.



LAUNCH CHECKLIST

1. Disarm the launch system by removing the safety key.
2. Loosely pack three squares of flameproof wadding into the body tube from the forward end where the shock cord mount is located. The wadding should slide smoothly into the center of the tube for maximum effect.
3. Stretch the parachute out by holding all parachute cords at the end where they are tied together and at the center of the parachute itself. Roll the parachute to fit the body tube easily. A light application of talcum powder to the parachute as it is folded will help deployment of the parachute. Be sure the wadding has been inserted before inserting the parachute.
4. Install the nose cone or coupler over the recovery device. The nose cone or coupler should fit snugly; not too tight or too loose. If the fit is too tight, you can sand the inside edge of the body tube or the nose cone shoulder lightly until you achieve a snug fit. If the nose cone is too loose, you can add masking tape to its shoulder to get a snug fit, or you can build up the inside edge of the body tube with a light application of glue. Be sure the glue is dry before test fitting the nose cone!
5. Carefully select the engine for launch. For a first flight, use the A8-3 engine as recommended. Insert the igniter as per engine instructions.
6. Engine Installation — Insert the engine into the engine tube mount until it stops against the top engine hook. The rear hook must latch over the rear of the engine. The igniter leads should be positioned between two fins and away from the launch lug side of the rocket. "DOUBLE CHECK THAT THE LAUNCH SYSTEM HAS BEEN DISARMED AS PER STEP 1 ABOVE".
7. Fit the launch rod through the launch lug of the rocket. The nose of the rocket should be pointing upwards. Be sure the rocket slides freely on the launch rod. Attach the launch system clips to the igniter leads.
8. Clear the launch area and follow all range and safety procedures.
9. Arm the launch system.
10. Countdown to launch!

IF A MISFIRE OCCURS, DISARM THE LAUNCH SYSTEM AND **WAIT ONE MINUTE** BEFORE APPROACHING THE ROCKET TO DETERMINE THE CAUSE OF MISFIRE. REMOVE THE SAFETY KEY FROM THE LAUNCH SYSTEM BEFORE YOU APPROACH THE LAUNCHER. **DO NOT** PUT YOUR HANDS AND FACE NEAR THE TOP OF THE ROCKET...

When you are ready to leave the launch site, we suggest you pick up and properly dispose of all debris such as used igniters, flameproof wadding or engine packages. A clean launch site is a safe launch site!

BLAST OFF



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JANUARY
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12 13 14 15 16
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FEBRUARY
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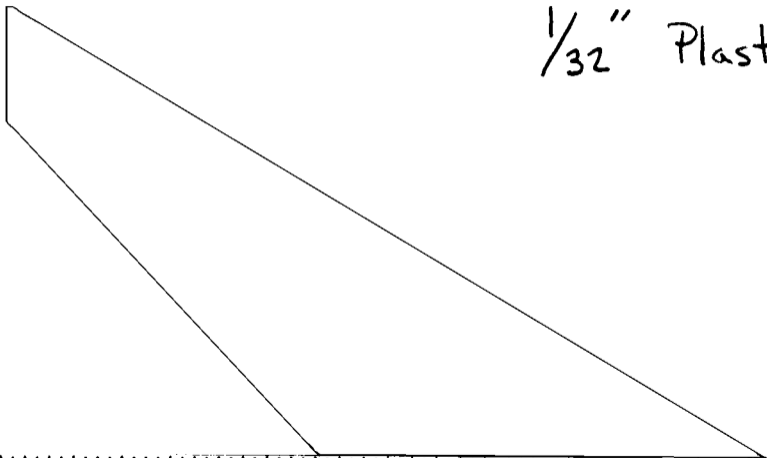
OCTOBER

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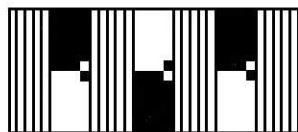
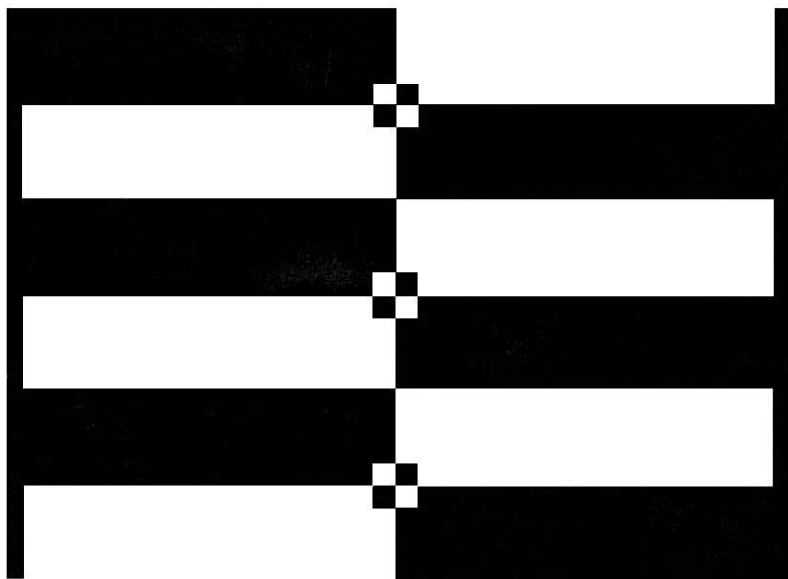
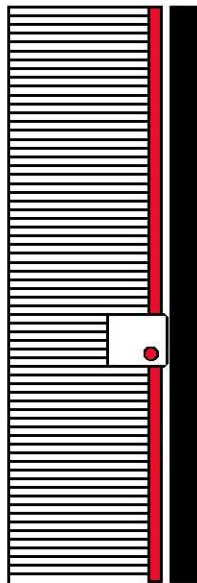
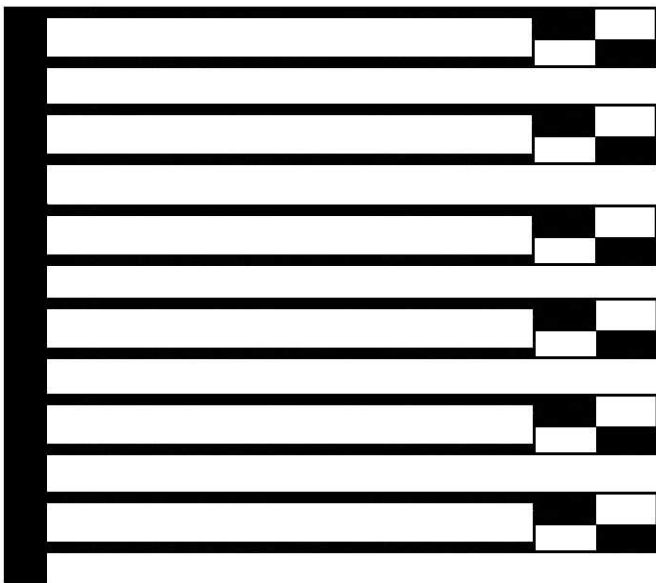


3 ea

$\frac{1}{32}$ " Plastic



UNITED STATES



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Refer to instructions for description of part numbers referenced below.

Part #1 - See jpg image

Part #3 - 7" BT-50

Part #4 - BT-50 coupler with bulkheads or solid BT-50 balsa bulkhead

Part #8 - 12"

Part #10 - BT-50 coupler

Part #11 - 1/8" X 1.5"

Part #12 - CR2050

Part #14 - BT-20+ (slides over BT-20 to hold engine hook)

Part #15 - 2.75" BT-20

Part #16 - CR2050 with slot cut for engine hook

Note: Lower fin unit length is 2.5". Single piece BT-50 23.5" in length can be used to clone this rocket. If you wish to maintain a payload section, one length of BT-50 @ 16.5" and another for the payload section @ 7".