

I.P.F.I. STRIKESHIP 'LIGHTNING'

Nicknamed the "Lightning", this new rocket ship sports enough armament to take on anything in the galaxy. Included with this kit are custom-turned hardwood nosecones and gun pods, pre-cut balsa wood wings, fins and canopy. Dowels, detailed sticker decals and fiber board body panels are included. This sleek, rear-ejection rocket also comes with removable nose gear for display purposes.

SKILL: Level 3

LENGTH: 20.75"

DIAMETER: 2.5"

WEIGHT: 20 ounces

MMT: 29mm

RECOVERY: 24" rip-stop nylon
parachute

RECOMMENDED MOTOR: F50-5

All kits require assembly. White glue, epoxy, finishing supplies, launch system, recovery wadding and rocket motors for launching are NOT included.

-Since FAT CAT ROCKETS, INC. cannot control the use of its products once sold, FAT CAT ROCKETS, INC. cannot be held responsible for any personal injury or property damage resulting from the use, handling or storage of this product and its components. The BUYER ASSUMES ALL RISKS AND LIABILITIES therefor and accepts and uses FAT CAT ROCKETS, INC. products on these conditions.

-All our model rocket kits are RECOMMENDED for age 12 and up with adult supervision.

-Our rocket kits contain small components that could easily be swallowed by young children. Keep all components out of reach of all children under 10 years of age.



FAT CAT
ROCKETS, INC.

www.fatcatrockets.com

STRIKESHIP LIGHTNING

PARTS LIST:

- 2- Wooden Nose Cones
- 2- 1 1/8" Body Tubes (12" Long)
- 1- 1 1/8" Motor Tube (6 1/4" Long)
- 1- 2 1/2" Body Tube (7 1/2" Long)
- 2- 1/4" Launch Lugs (6" Long)
- 1/4" Balsa Wings
- 5/32" Balsa Fins
- Balsa Cockpit
- 1/4" Dowel (18" Long)
- 5/32" Dowel (8" Long)
- Centering Rings
- 2- Wooden Gun Pods
- Fiber Board Strips (1.4" Long)
- Shock Cord Mount (8" Long Cable With Clips)
- Shock Cord
- 24" Ripstop Nylon Parachute
- Sticker Decals
- Nose Weight

THINGS YOU WILL NEED FOR ASSEMBLY:

- Hobby Knife
- Pencil
- Sand Paper
- Epoxy
- Ruler
- Primer And Paint (Your Choice)
- Masking Tape
- CA Glue (Zap)
- Yellow Glue

BEFORE YOU BEGIN:

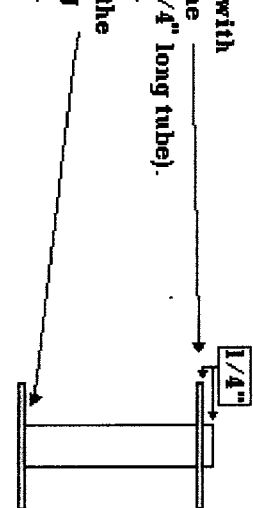
- Examine all pages of the plans to familiarize yourself with the assembly of this kit. Follow each step closely.
- Take your time, don't rush. Remember good things come to those who wait.
- Be sure to follow all NAR and Tripoli regulations when flying this model.
- Use a launch rod no shorter than five feet long when flying this model.

RECOMMENDED MOTOR: F50-S

This model is designed for lower impulse F motors from F40 to F62. (Single use or Reloads). Delays from 4 to 6 seconds can be used.

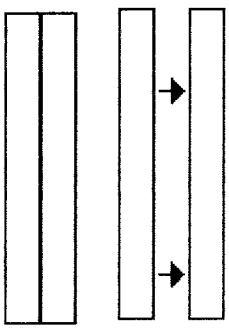
Step 1

- A. Mount the centering ring with the two holes 1/4" from one end of the motor tube (5 3/4" long tube).
- B. Mount the other centering ring onto the other end of the motor tube. Place the ring flush with end of the tube.
- C. Fillet all joints.

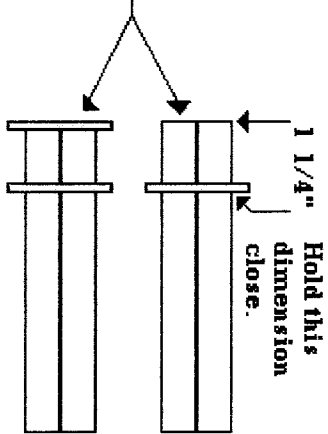


Step 2

- A. Using a flat surface, glue the two 12" long tubes together as shown.

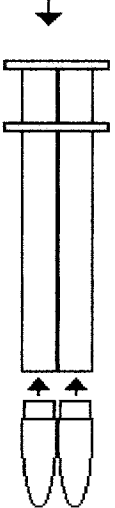


- B. When dry mount one of the centering rings 1 1/4" from one end of the tube assembly. Attach the other centering ring to the end of the assembly as shown.

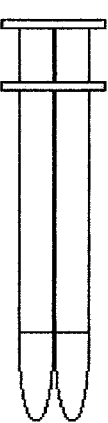


Place this ring flush with the end.

- C. Epoxy the provided weight into the two noses. When dry, glue the noses into the end of the tube assembly.



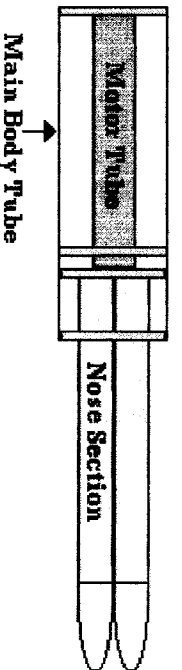
- D. Fillet all joints and allow to dry thoroughly before proceeding.



If you have any questions, contact us at: 407-298-1363
Or: Info@FatCatRockets.com

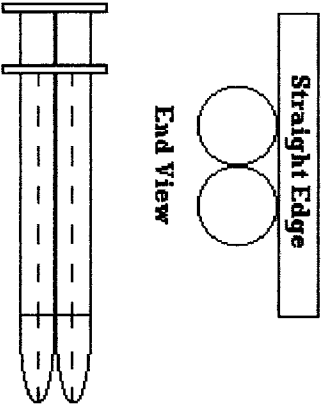
Step 3

- A. Slip the main body tube onto the nose assembly. The front centering ring is flush with the end of the tube.
- B. Slide the motor mount assembly into the rear of the main body tube. The rear centering ring should be flush with the end of the main body tube. (If the motor tube is too long, trim the required excess off of the front of the motor tube.)

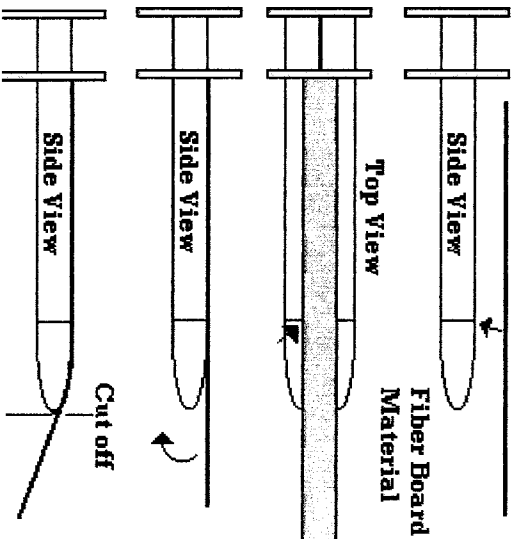


NOTE: This part of constructing the model can be tricky. Take your time and be careful.

- C. Lay a straight edge on top of the nose assembly. Mark the high points at both ends of the tubes. Repeat this step on the other side. (These marks are to assist in the placement of the nose plates).

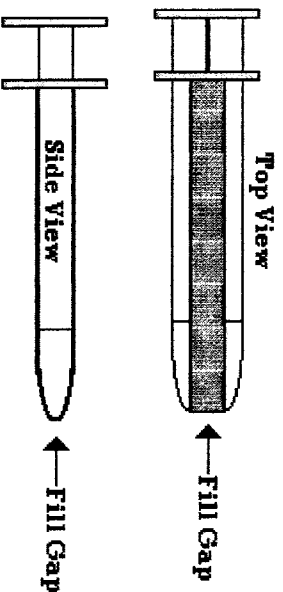


- D. Attach one of the provided fiber boards as shown. Carefully curve the piece to fit the noses. When dry, cut off the excess material, flush with the flat tips of the noses.

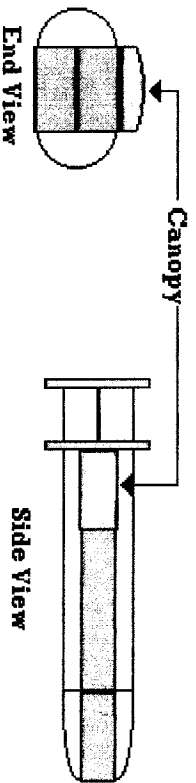


- E. Repeat Step B on the other side of the nose assembly.

- F. Cut a piece of the left-over material to fill the remaining gap in the tip of the nose section. Filllet the seams in the tip and allow to dry thoroughly.

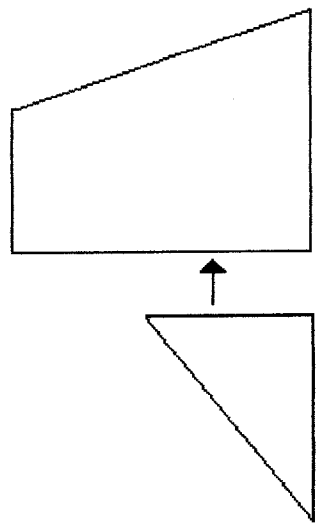


- G. Attach the canopy onto one side as shown. Place the canopy against the centering ring in the center of the assembly. Run a glue fillet around the outside of the canopy to fill the seams and gaps.

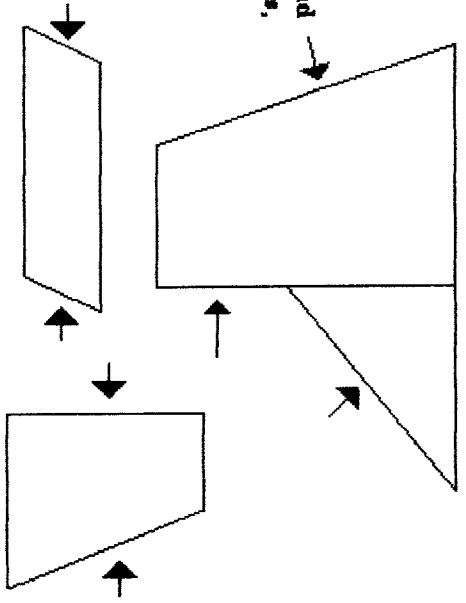


Step 4

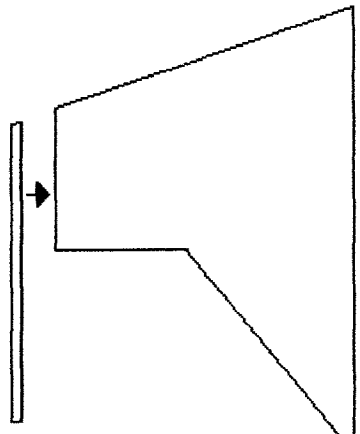
A. Glue the 1/4" wing panels together as shown.



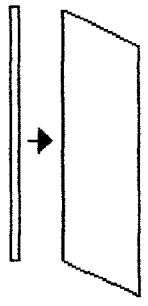
B. Sand round the leading and trailing edges of the wings, lower fins, and rudders.



C. Use CA glue (Zap) to seal the leading edges of the wings, fins, and rudders.

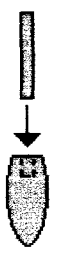


D. Cut two pieces of 1/4" dowel, 4 3/4" long. Glue these dowels to the wingtips as shown.



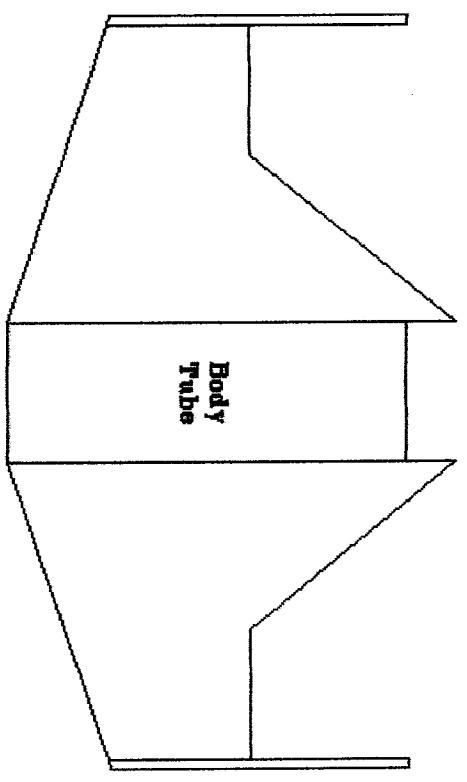
E. Cut two pieces of the 5/32" dowel, 4" long. Glue these to the bottom of the lower fins as shown.

E. Cut two pieces of the 1/4" dowel, 1-1/4" long. Glue these into the gunpods as shown.



Step 5

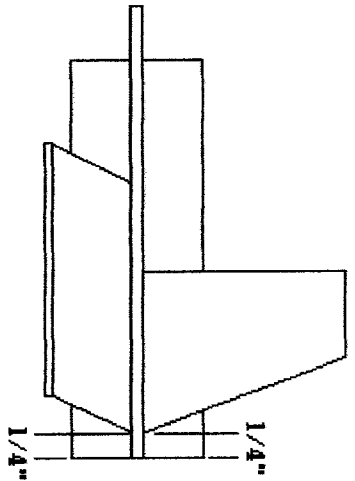
A. Using the fin guide, mark the main body tube for the wings. Draw the lines for the wing down the full length of the body tube.



B. Using sandpaper, rough up the area where the wings will attach. Epoxy the wings into place. NOTE: The rear ends of the wings are even with the end of the body tube.

Step 6

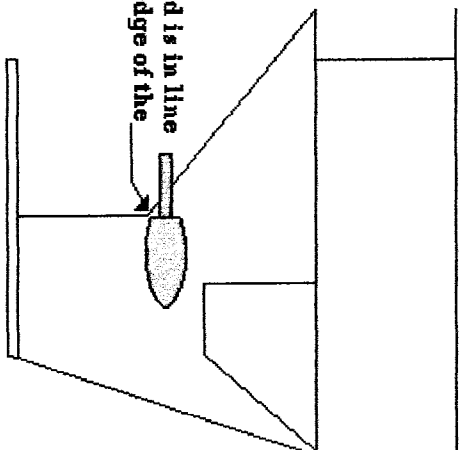
- A. Using the launch lugs as spacers, glue the lower fins into place on the wings. The rear of the lower fins are 1/4" from the back of the wings. **NOTE: DO NOT GLUE THE LAUNCH LUGS INTO PLACE YET.** Fillet the fin joints and allow to dry.
- B. Using the fin guide, bevel the bottom of the rudders as shown in the drawing. Attach the rudders as shown, with the rear of the rudders placed 1/4" from the rear of the wings. Fillet the rudder joints and allow to dry.



Step 8

- A. Glue the gun pods to the top of the wings as shown.

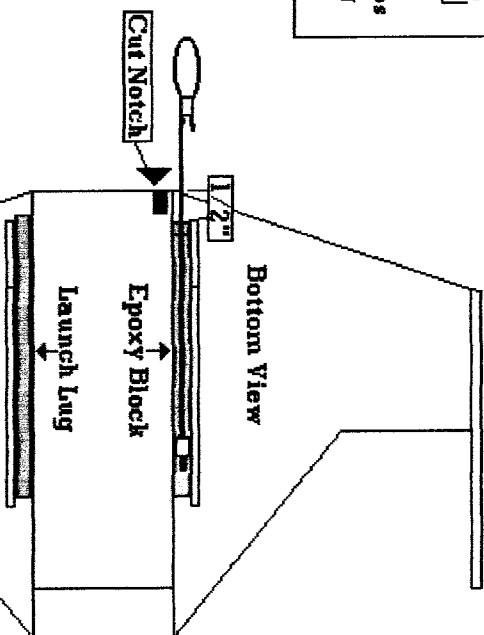
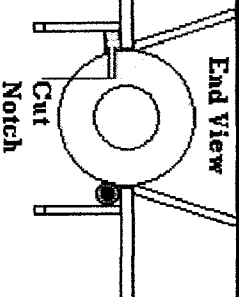
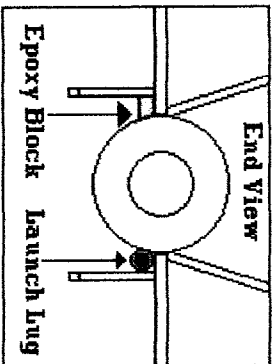
NOTE: Front of pod is in line with the leading edge of the wing tip.



Step 7

- A. Using the metal cable and copper clips, assemble the shock cord mount as shown.
- B. Epoxy the shock cord mount into the space between the body and one of the lower fins. Leave the last 1/2" free of epoxy. Allow to dry.
- C. Using masking tape, block off both ends of the fin. Be sure that the tape is leak proof. Fill this area with five minute epoxy. The epoxy block should be about 3/8" deep. Allow this to dry thoroughly, then remove the tape.
- D. Glue one of the launch lugs under the other wing as shown.

1/4"
1"
Use a hammer to flatten the clips. You do not want the clips to come off of the cable during the recovery of your model.



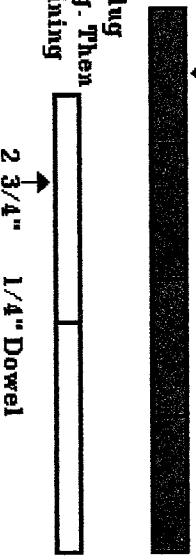
NOTE: Wrap a piece of masking tape around the clip of the loop end to prevent snagging the parachute.



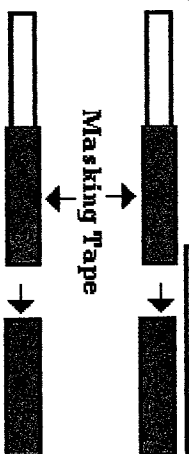
Step 9

1 1/2" Launch Lug

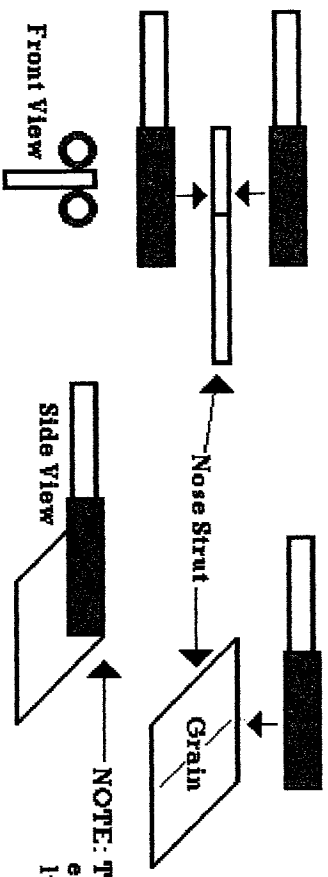
A. Cut the remaining launch lug into four pieces 1 1/2" long. Then cut two pieces of the remaining 1/4 dowel 2 3/4" long.



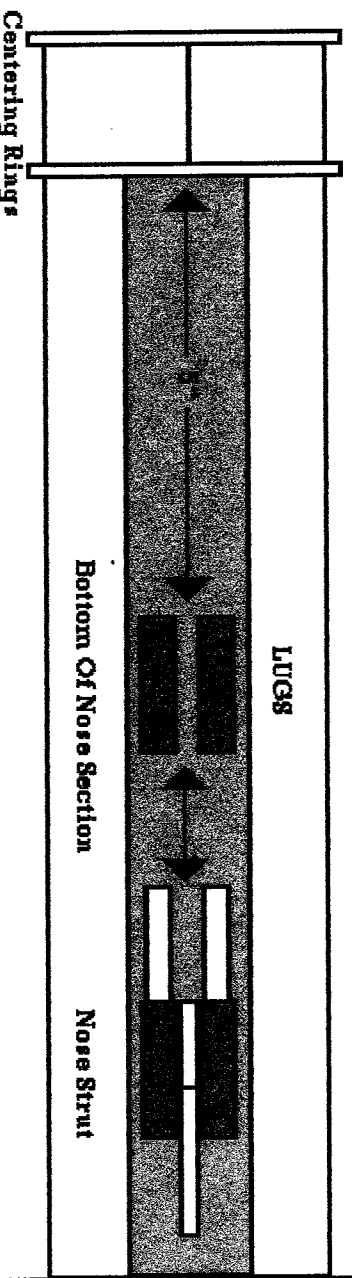
B. Wrap one end of the dowels with masking tape as shown. Then glue the dowels into the launch lugs as shown. NOTE: The end of the dowel is flush with the end of the lug.



C. Attach the lug/dowel assemblies to the nose strut as shown. Allow to dry thoroughly.

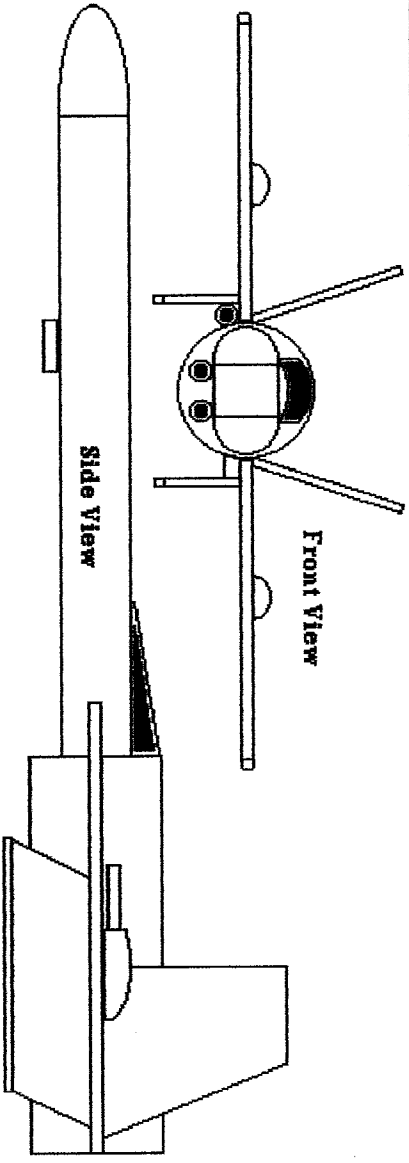


D. Glue the other two lugs onto the bottom side of the nose section as shown. NOTE: Be sure that the lugs are spaced so that the nose strut can be removed freely. WARNING: NOSE STRUT IS FOR DISPLAY ONLY.



Step 10

A. Epoxy the nose assembly into the fin unit. The centering ring behind the canopy is flush with the front end of the fin tube. NOTE: Be sure the canopy and the rudders are on the same side. Allow the epoxy to set thoroughly.

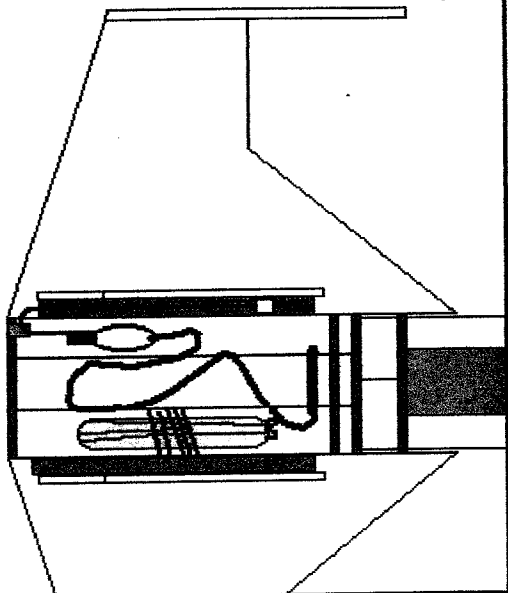


Finish Page

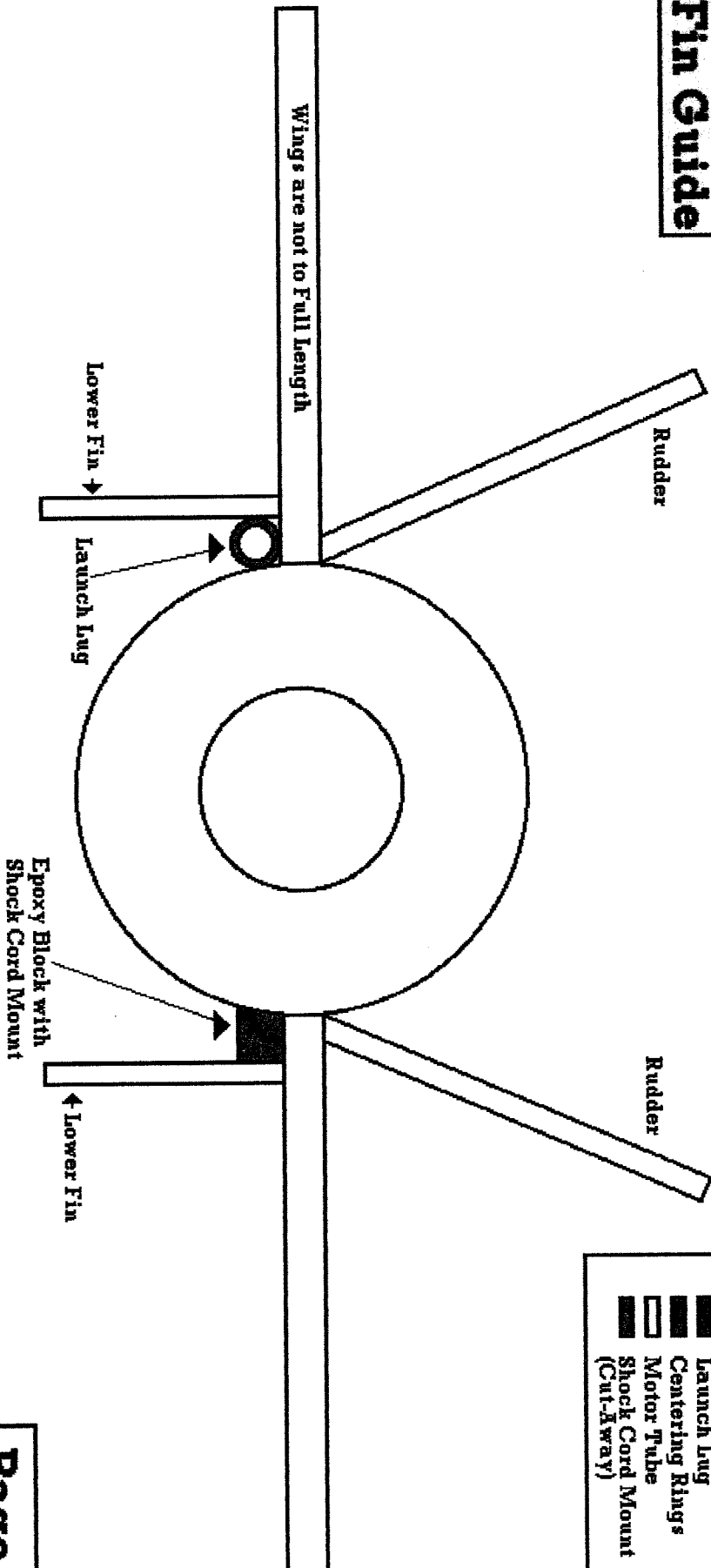
- A. Prime and sand model to your desired finish.
 - B. Paint your model as desired. There are a couple of paint schemes suggested on the color pages. Allow paint to dry thoroughly.
 - C. Apply provided stickers as shown.
- NOTE:** Additional detail can be added with aftermarket waterslide decals found at your local hobby store. We have found 1:48 scale model decals fit this need well.






FINAL STEPS:

- A. Tie one end of the shock cord to the motor tube. Attach the parachute to the shock cord near the motor tube. Tie the other end of the shock cord to the eye on the shock cord mount.
- B. Carefully pack the shock cord and the parachute around the motor tube. Slide this into the rear of the model. Be sure to fold the cable loop onto the notch in the body tube.
- C. With the motor mount installed, pack some flame resistant wadding into the motor tube. Pack the wadding up into the front of the tube.
- D. This model is designed for the motor to be retained by friction fit. This requires you to wrap some masking tape around the nozzle end of the motor forming a shoulder. Apply tape to the outside of the motor (and test fit) until it fits snugly.



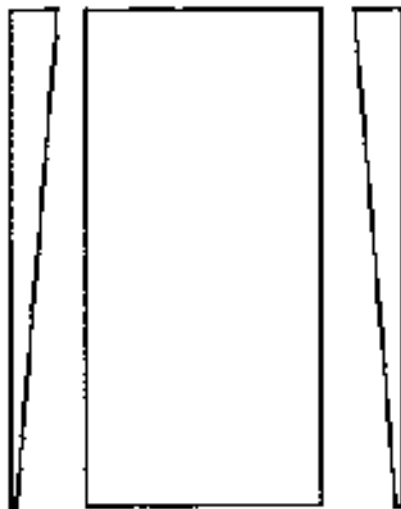
Fin Guide



-  Parachute
-  Launch Lug
-  Centering Rings
-  Motor Tube
-  Shock Cord Mount (Cut-Away)

Canopy Pattern

Use this pattern for the canopy windows. Cut out the windows from the black sticker material.



**TODAY
1993**

S M T W T F S

JANUARY

1 2
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10 11 12 13 14 15 16
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24 25 26 27 28 29 30
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FEBRUARY

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14 15 16 17 18 19 20
21 22 23 24 25 26 27
28

MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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29 30 31

SEPTEMBER

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OCTOBER

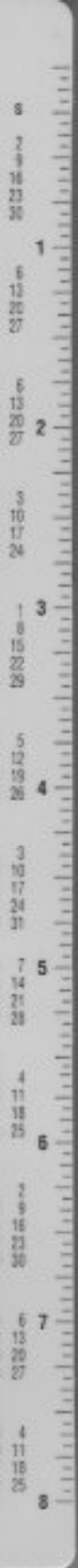
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31

NOVEMBER

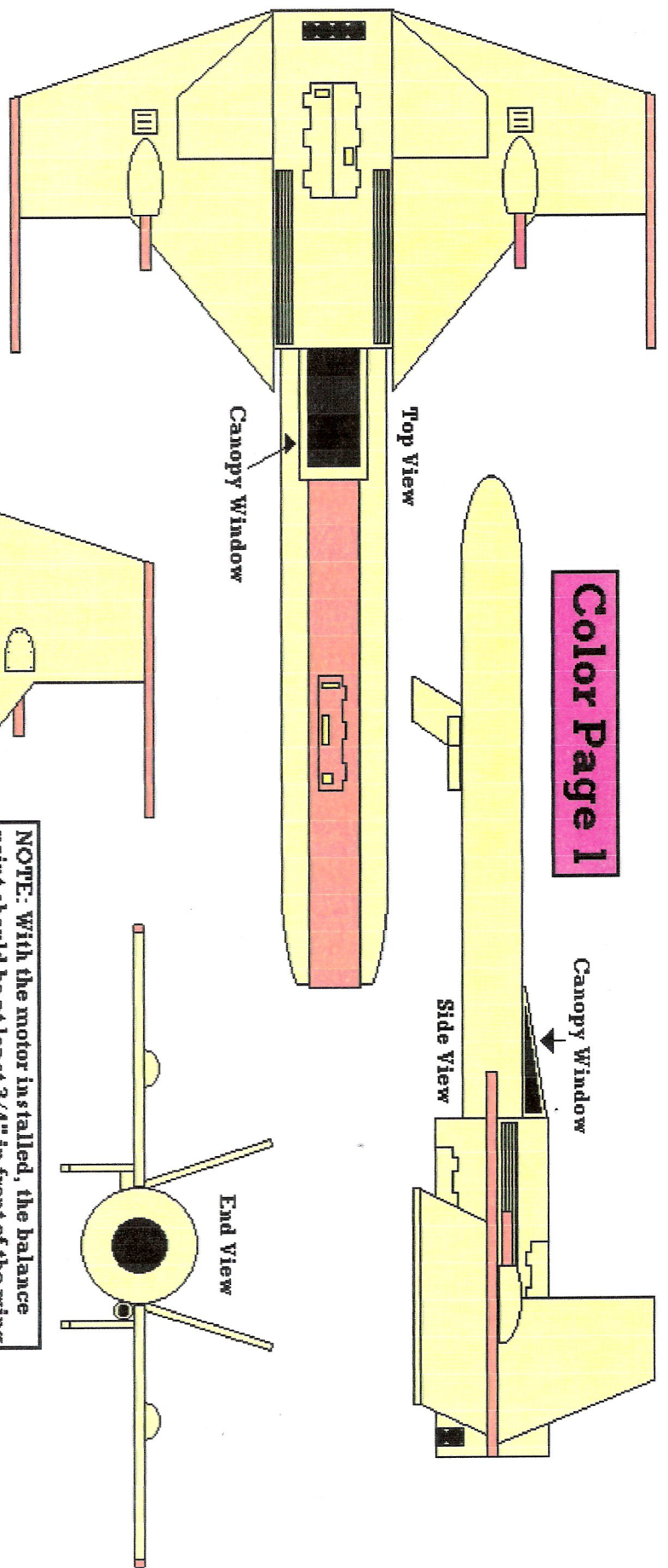
1 2 3 4 5 6
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DECEMBER

1 2 3 4
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Color Page 1



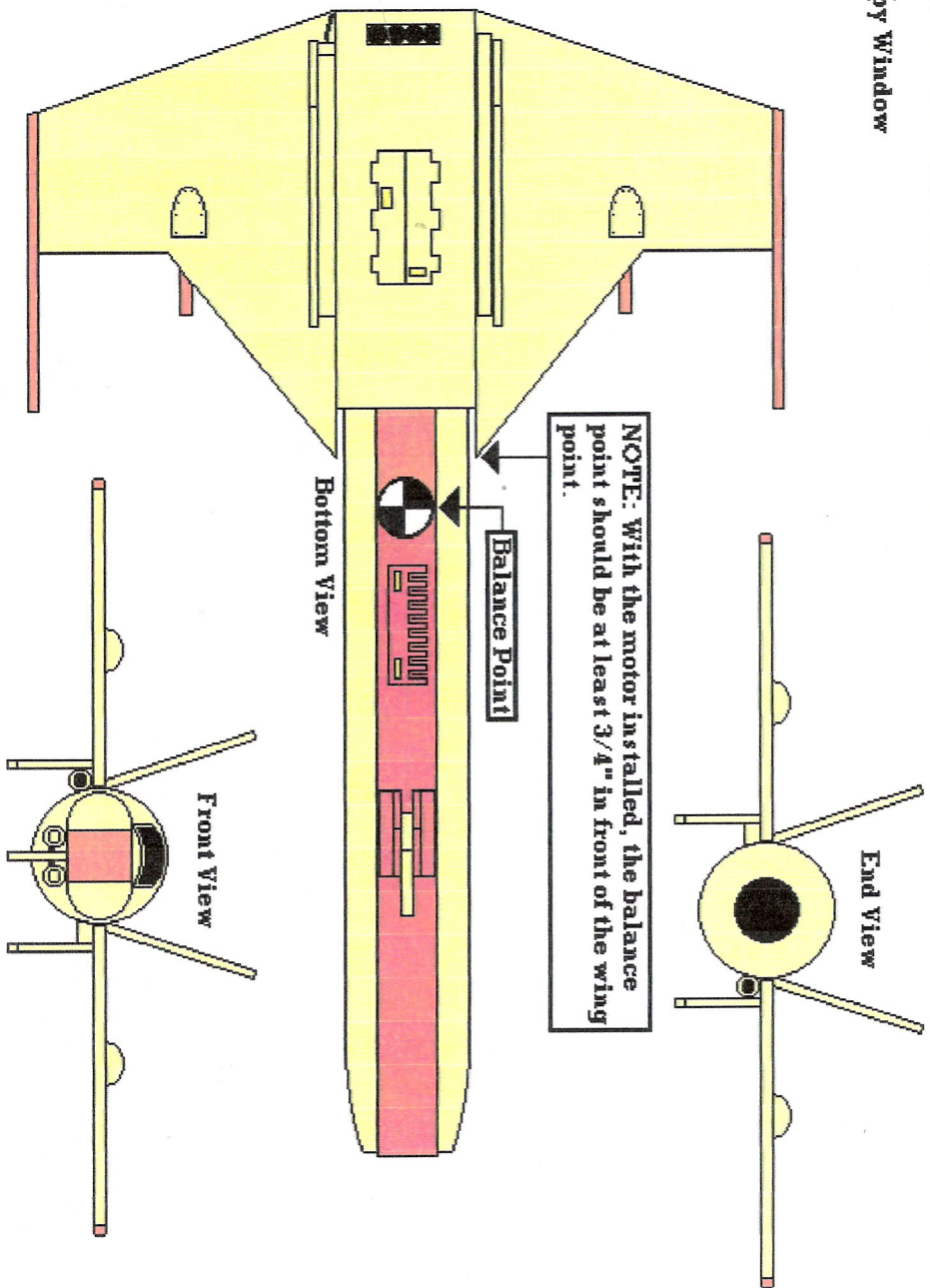
A. Our first prototype is painted gloss white. The following pages show possible color schemes for you to consider. When painting is finished, apply the stickers.

B. Using the Canopy Pattern, cut out the windows for the canopy from the black sticker material. Carefully apply as shown.

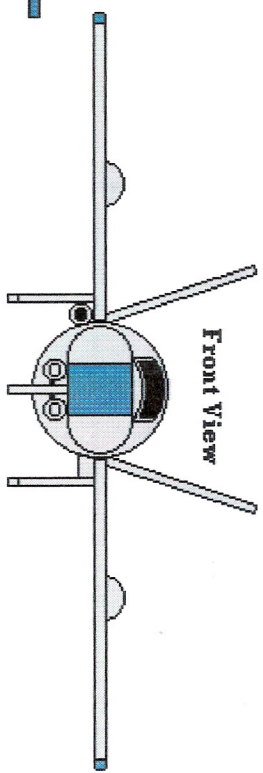
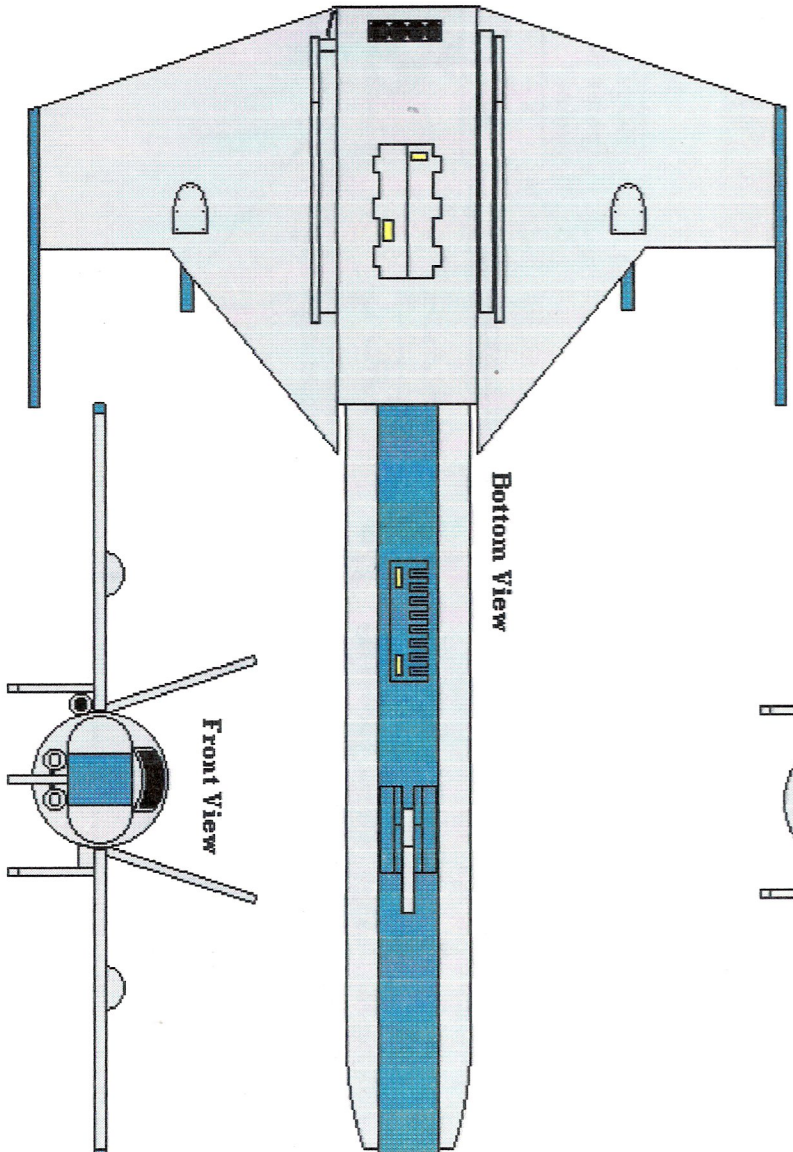
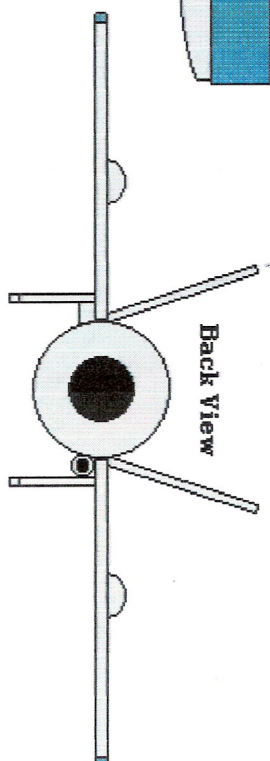
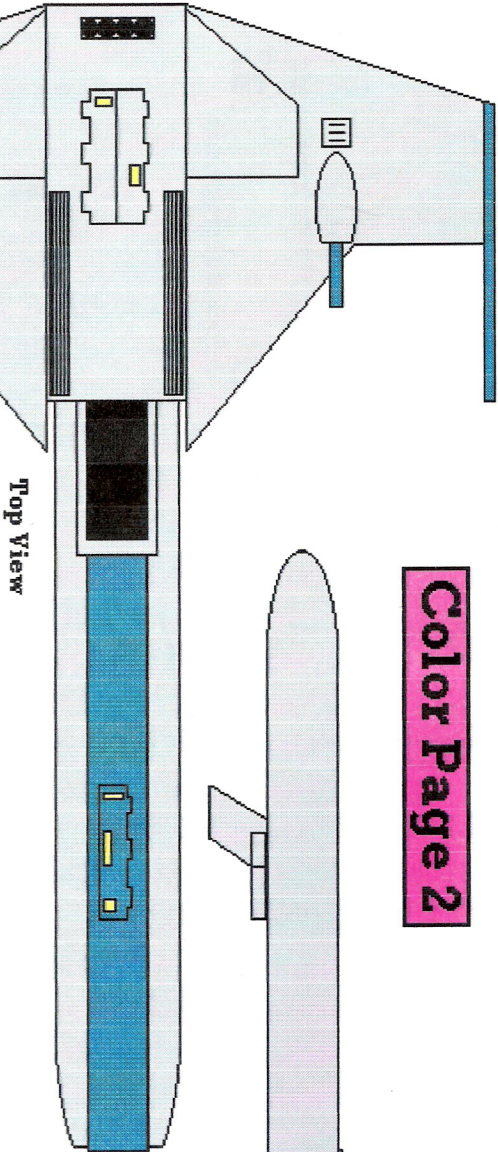
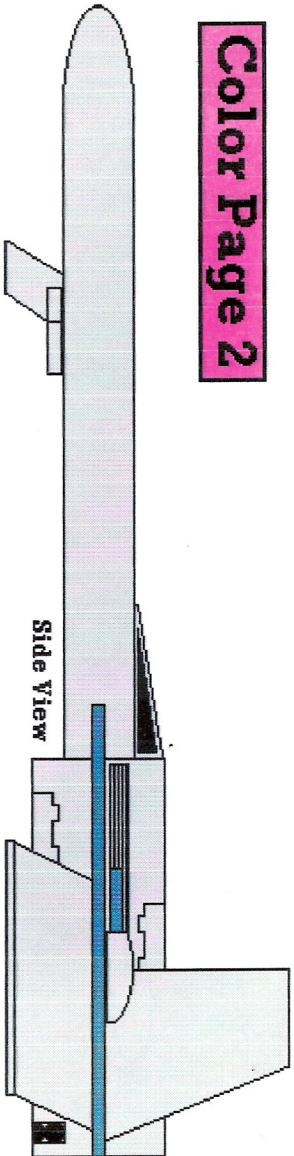
C. Cut out and apply the stickers from the sticker as shown.

NOTE: Refer to Color Page 2 for additional instructions.

NOTE: With the motor installed, the balance point should be at least 3/4" in front of the wing point.



Color Page 2



Cut out the double doors sticker.

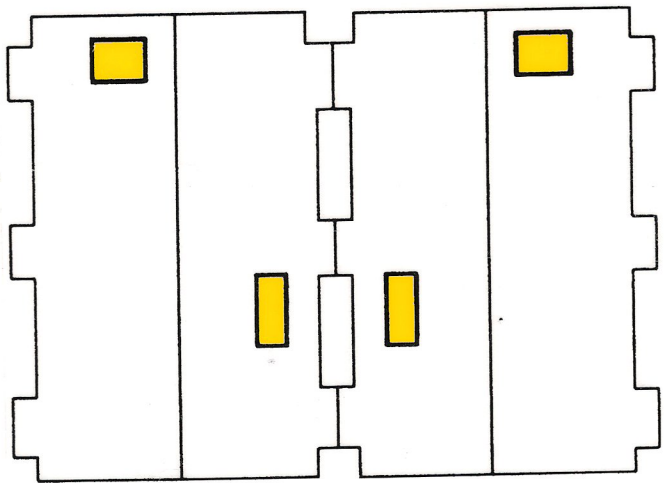
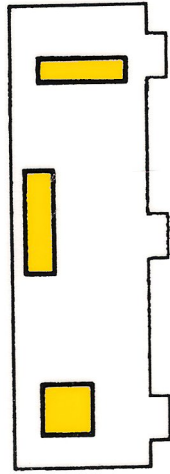
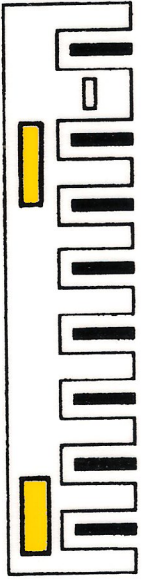
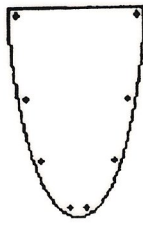
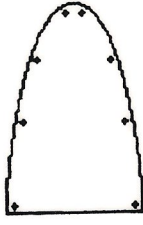
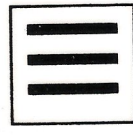
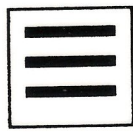
Cut the doors apart as shown.

Open Hinges

Apply doors as shown. With a black pen, draw in the lines on the open hinges.

The diagrams show a double-door sticker with a central slot and two side doors. A vertical line labeled 'Cut' indicates where to separate the doors. Below, the doors are shown separated, with yellow rectangular hinges. The text 'Open Hinges' is written below the separated doors.

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8



Parts Listing for Fat Cat Rockets, Inc.
I.P.F.I. Strikeship Lightning

1. Wooden nose cones – see miscellaneous pattern jpeg. Nose cones have been hollowed out.
2. Fiber strips are 1.25” wide and 1/16” thick (2ea).
3. Weights total 142 grams (5 oz).