

Build Instructions for ESTES 0810 220 Swift Rocket

This document is a supplement to the instructions that are provided with the rocket kit, based on initial build experience.

Supplies

You will need to following items in addition to the rocket kit.

ITEM	Use Description
Pencil or Pen	Marking
Scissors	Need to cut pattern
Utility knife	Cut balsa fins
Ruler	Cut/mark straight lines
Sandpaper 150 or 200 grit	Sand fins
Glue - fast drying type. LOCTITE GO2 Glue dries in 6 minutes.	Glue fins and launch guide
Paint - primer and colors	Provide unique rocket design
Painters tape	Tape pattern and mask areas during painting



Step 1: Tube Marking

- The fin guide pattern is part of step 1 on the instruction sheet
- Cut out the pattern
- Put pattern around rocket tube and tape in center.
- There are three lines on the pattern that indicate where the fins should be placed on the rocket tube. Mark on both end of the line
- Draw a straight line between the two marks to indicate where the rocket fins should be placed. Make sure they go to the bottom of the tube.



Step 2: Prepare Fins

- The fin pattern is part of step 2 on the instruction sheet
- Cut out the fin pattern. NOTE: You can add an additional 1/4 -1/2 inch to the fin patter if you want the rocket to be a little taller. Adjust size when marking balsa wood.
- Place the fin pattern on the balsa wood and draw the fins.



- Use the ruler and utility knife to cut the fins out of the balsa wood. NOTE: cut big and sand to size. NOTE: There is wood for 4 fins if you make a mistake.



- Place the fins together as a group and sand to the same size along all the edges.



Step 3: Attach Fins

- Put line of glue along root end of fin. Root end is a little larger than other narrow end.
- Let dry for 1/2 the dry time of the glue
- Add second line of glue will give it more stick, but may extend dry time.



- Place fin on guide line on rocket tube and HOLD in place until set
- Repeat for other two fins.



Step 4: Assemble Nose Cone and Launch Lug

- Apply line of glue along Launch Lug which is small straw like item
- Attach Launch Lug along fin and let dry
- Put glue along Nose Cone and place in rocket body tube
- Apply second line of glue along Launch Lug between fin and rocket body.
- Apply second line of glue where balsa fins meet rocket body.

Step 5: Rocket Finishing

- After all glue is dry and rocket is solid, you are ready to paint
- Apply primer paint to entire rocket and let dry
- If you want different colors, use tape to mask areas. Nose cone or fins are option.
NOTE: paint soaks into balsa wood and you will need several coats.
- Spray selected colors where you want on the rocket.
- Apply Decals when paint is dry (if desired)



NOTE: Try to make your rocket unique so it can be distinguished from the other rockets in the group. Definitely put your name or initials on the rocket.