



EQUINOX

SKILL LEVEL 2

HONORABLE MENTION
 DESIGN OF THE MONTH
 By MIKE ROSSI Canon City, Colo.
 ESTES INDUSTRIES ROCKET PLAN NO. 80

★ BUILD THE EQUINOX WITH ESTES HIGH PERFORMANCE PARTS AND ACCESSORIES

PARTS LIST

- 1 NOSE CONE - BNC-50J
- 1 BODY TUBE - BT-50
- 1 BODY TUBE - BT-55
- 1 BODY TUBE - BT-20J
- 2 CENTERING RINGS - AR-2050
- 2 CENTERING RINGS - AR-5055
- 1 ENGINE BLOCK - EB-20A
- 2 FIN STOCK - BFS-30
- 1 LAUNCH LUG - LL-2B
- 1 PARACHUTE KIT - PK-18
- 1 SHOCK CORD - SC-2
- 1 SCREW EYE - SE-2
- 1 6" x 6" SMOOTH WHITE PAPER

ADDITIONAL MATERIALS

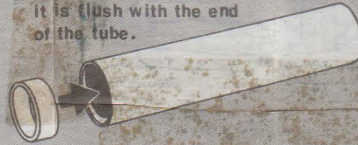
- Hobby Knife
- White Glue
- Ruler
- Sanding Material
- Sanding Sealer
- Enamel Paint (Spray)
- Sharp Pencil

RECOMMENDED ENGINES

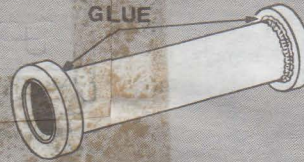
- A8-3 B6-4 C6-5

1

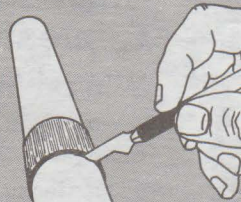
a. Apply glue around the inside of one end of the engine holder tube and insert the engine block until it is flush with the end of the tube.



b. Glue a centering ring (AR-2050) to each end of the engine holder tube (BT-20J) and set aside to dry.

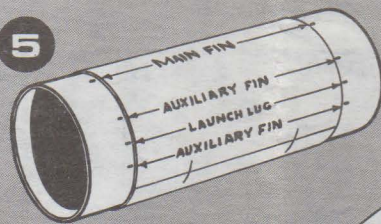


2



Measure 11 5/8" from one end of the body tube and cut tube at this point. Method: Wrap masking tape for raised guide line and cut with sharp hobby knife. Measure the other end of the BT-55 body tube previously.

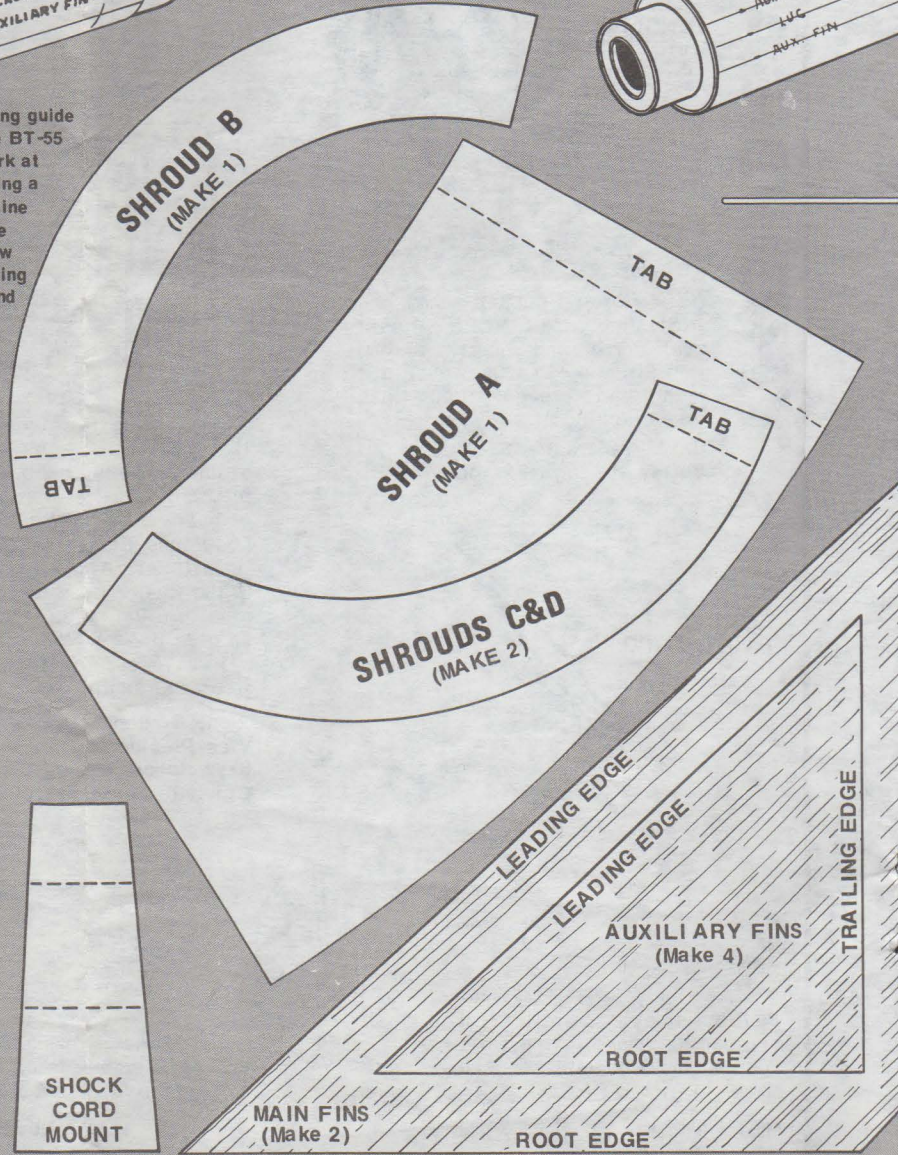
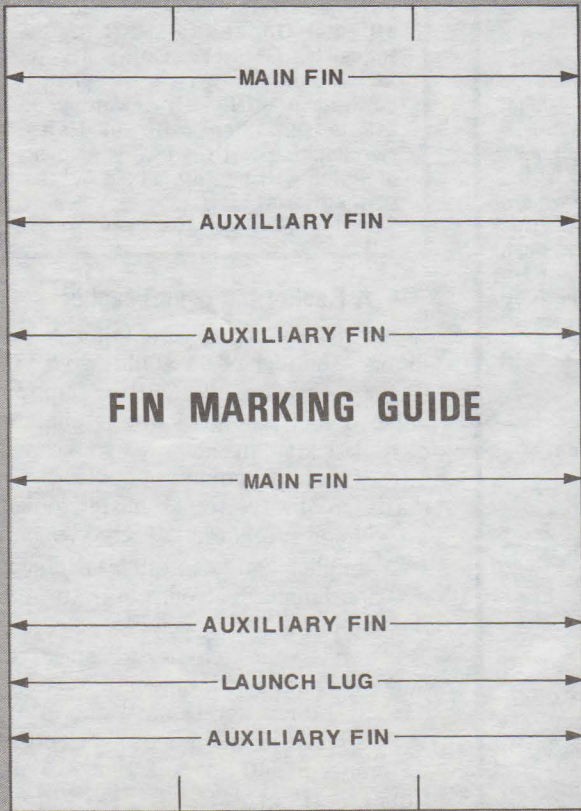
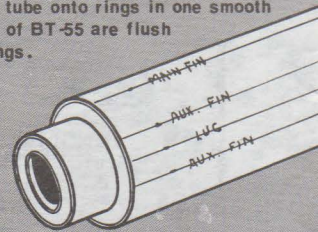
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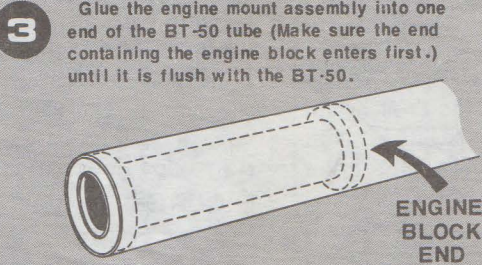


Cut out the fin marking guide and wrap it around the BT-55 body tube, place a mark at each arrow point. Using a pencil, identify each line on the BT-55. Remove marking guide and draw straight lines connecting each matching front and rear mark.

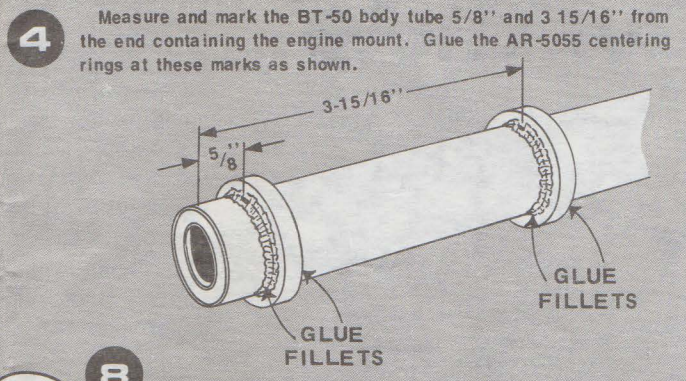
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Apply glue to each AR-5055 centering ring. Then slide BT-55 body tube onto rings in one smooth motion until ends of BT-55 are flush with centering rings.

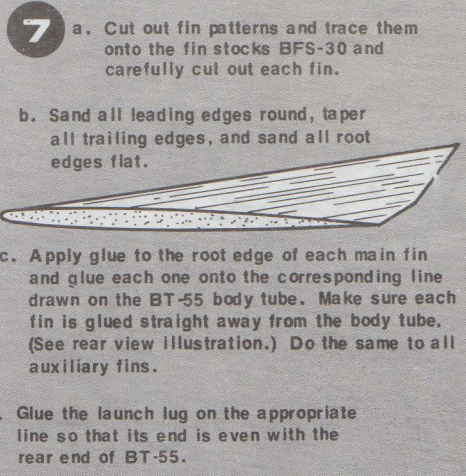




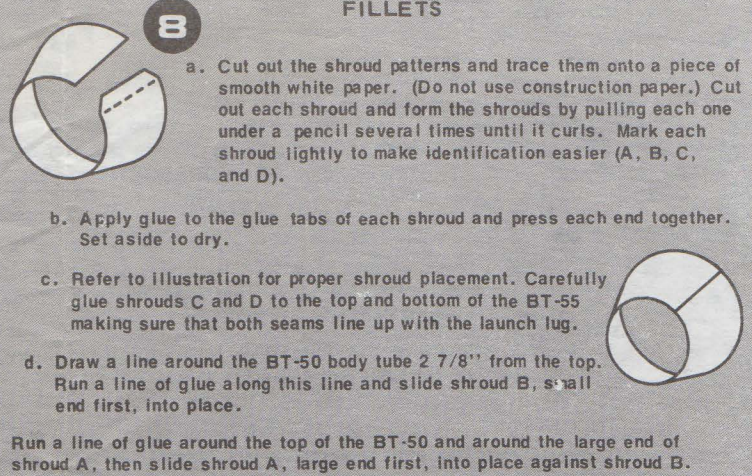
3 Glue the engine mount assembly into one end of the BT-50 tube (Make sure the end containing the engine block enters first.) until it is flush with the BT-50.



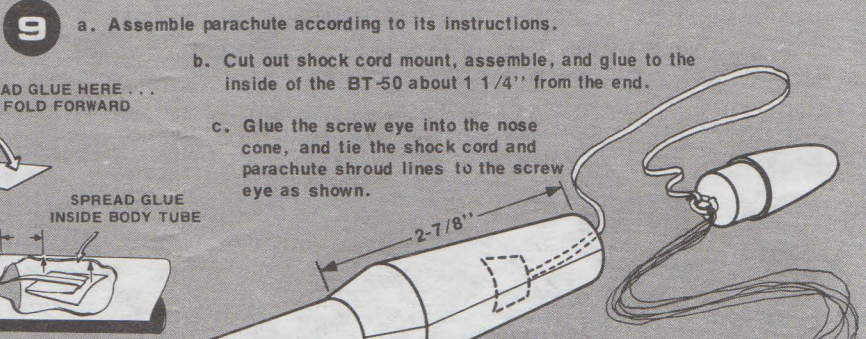
4 Measure and mark the BT-50 body tube $5/8''$ and $3\ 15/16''$ from the end containing the engine mount. Glue the AR-5055 centering rings at these marks as shown.



7 a. Cut out fin patterns and trace them onto the fin stocks BFS-30 and carefully cut out each fin.
 b. Sand all leading edges round, taper all trailing edges, and sand all root edges flat.
 c. Apply glue to the root edge of each main fin and glue each one onto the corresponding line drawn on the BT-55 body tube. Make sure each fin is glued straight away from the body tube. (See rear view illustration.) Do the same to all auxiliary fins.
 d. Glue the launch lug on the appropriate line so that its end is even with the rear end of BT-55.

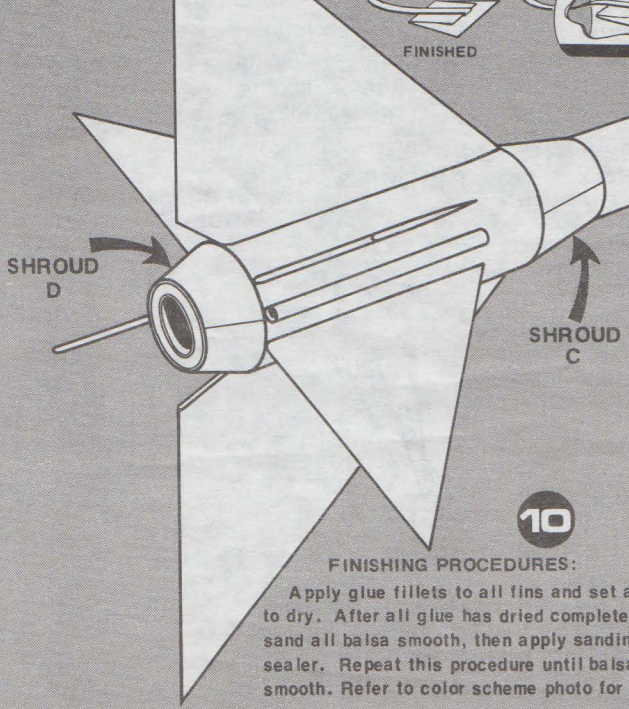
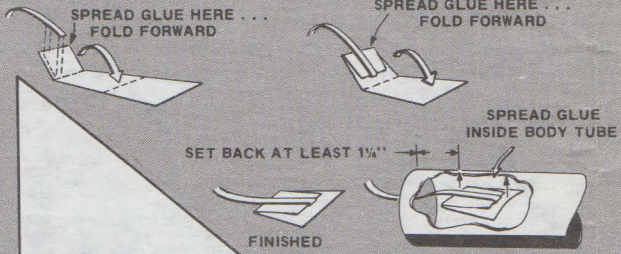


8 a. Cut out the shroud patterns and trace them onto a piece of smooth white paper. (Do not use construction paper.) Cut out each shroud and form the shrouds by pulling each one under a pencil several times until it curls. Mark each shroud lightly to make identification easier (A, B, C, and D).
 b. Apply glue to the glue tabs of each shroud and press each end together. Set aside to dry.
 c. Refer to illustration for proper shroud placement. Carefully glue shrouds C and D to the top and bottom of the BT-55 making sure that both seams line up with the launch lug.
 d. Draw a line around the BT-50 body tube $2\ 7/8''$ from the top. Run a line of glue along this line and slide shroud B, small end first, into place.
 e. Run a line of glue around the top of the BT-50 and around the large end of shroud A, then slide shroud A, large end first, into place against shroud B.

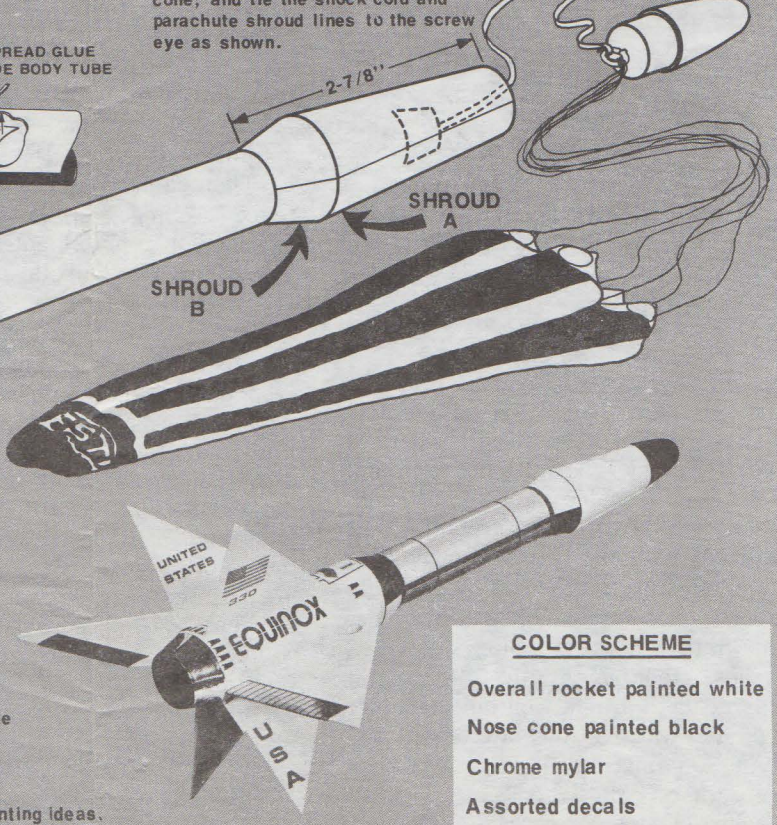


9 a. Assemble parachute according to its instructions.
 b. Cut out shock cord mount, assemble, and glue to the inside of the BT-50 about $1\ 1/4''$ from the end.
 c. Glue the screw eye into the nose cone, and tie the shock cord and parachute shroud lines to the screw eye as shown.

REAR VIEW



10 FINISHING PROCEDURES:
 Apply glue fillets to all fins and set aside to dry. After all glue has dried completely, sand all balsa smooth, then apply sanding sealer. Repeat this procedure until balsa is smooth. Refer to color scheme photo for painting ideas.



COLOR SCHEME
 Overall rocket painted white
 Nose cone painted black
 Chrome mylar
 Assorted decals

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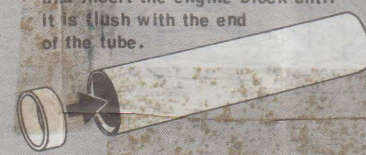
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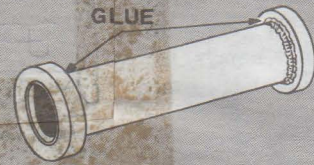
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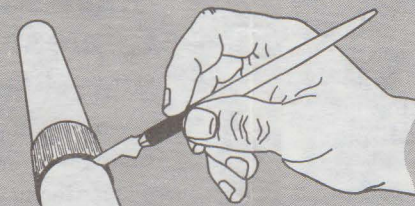
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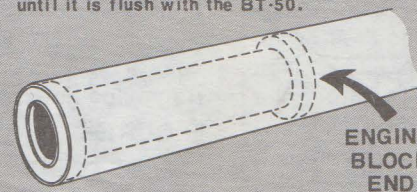
2



Measure 11 5/8" from one end of the BT-50 body tube and cut tube at mark. (Recommended method: Wrap masking tape around body tube for raised guide line and carefully cut tube with sharp hobby knife.) Measure 3 9/16" from one end of the BT-55 body tube and cut as mentioned previously.

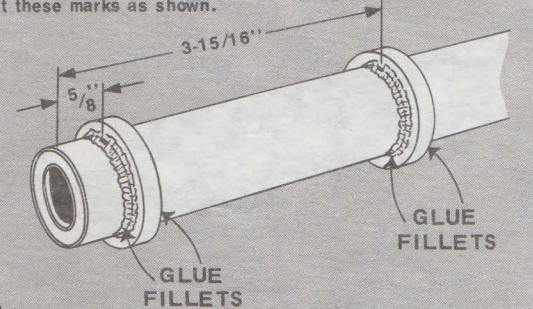
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Glue the engine mount assembly into one end of the BT-50 tube (Make sure the end containing the engine block enters first.) until it is flush with the BT-50.



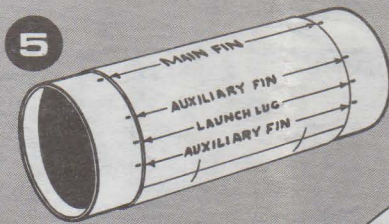
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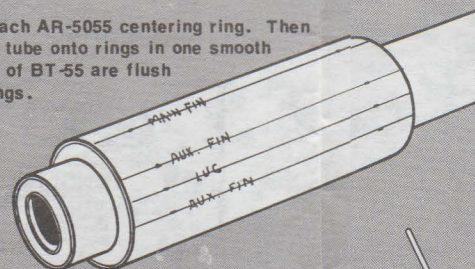
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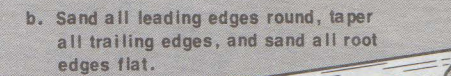
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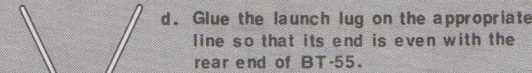
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d. Draw a line around the BT-50 body tube 2 7/8" from the top. Run a line of glue along this line and slide shroud B, small end first, into place.

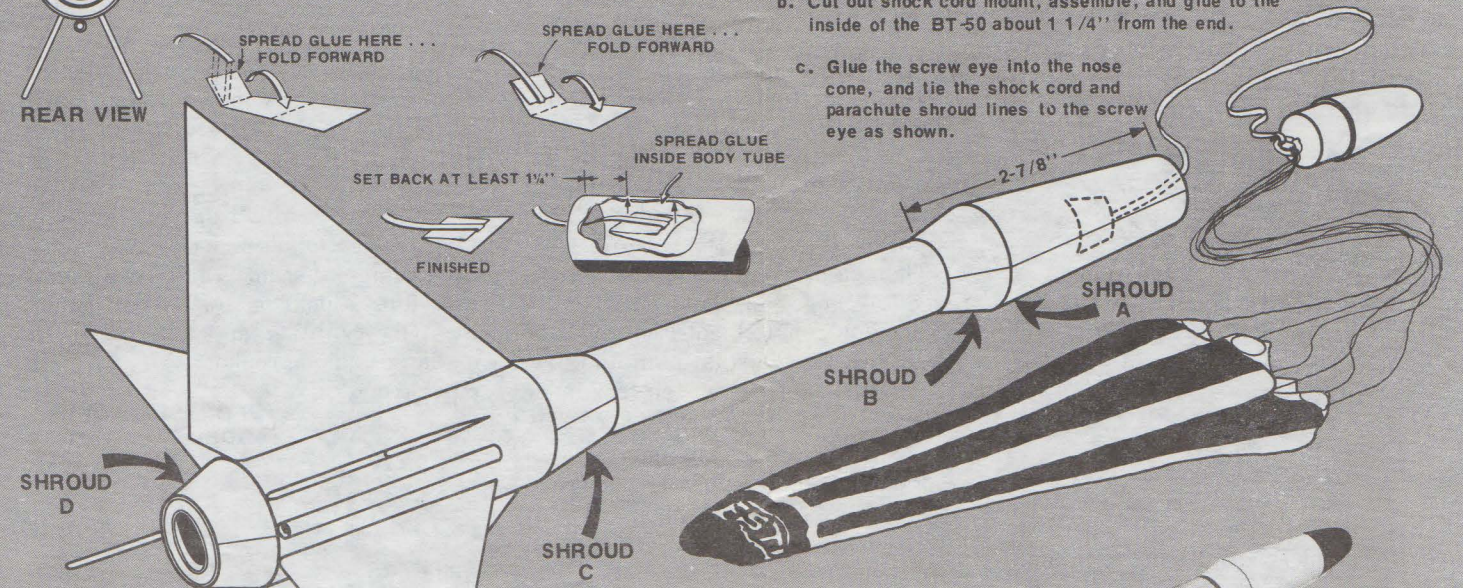
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9

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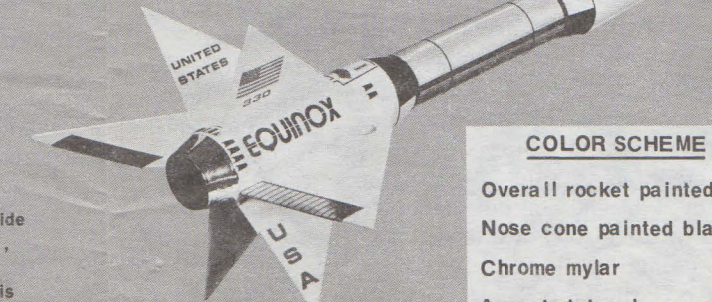
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