

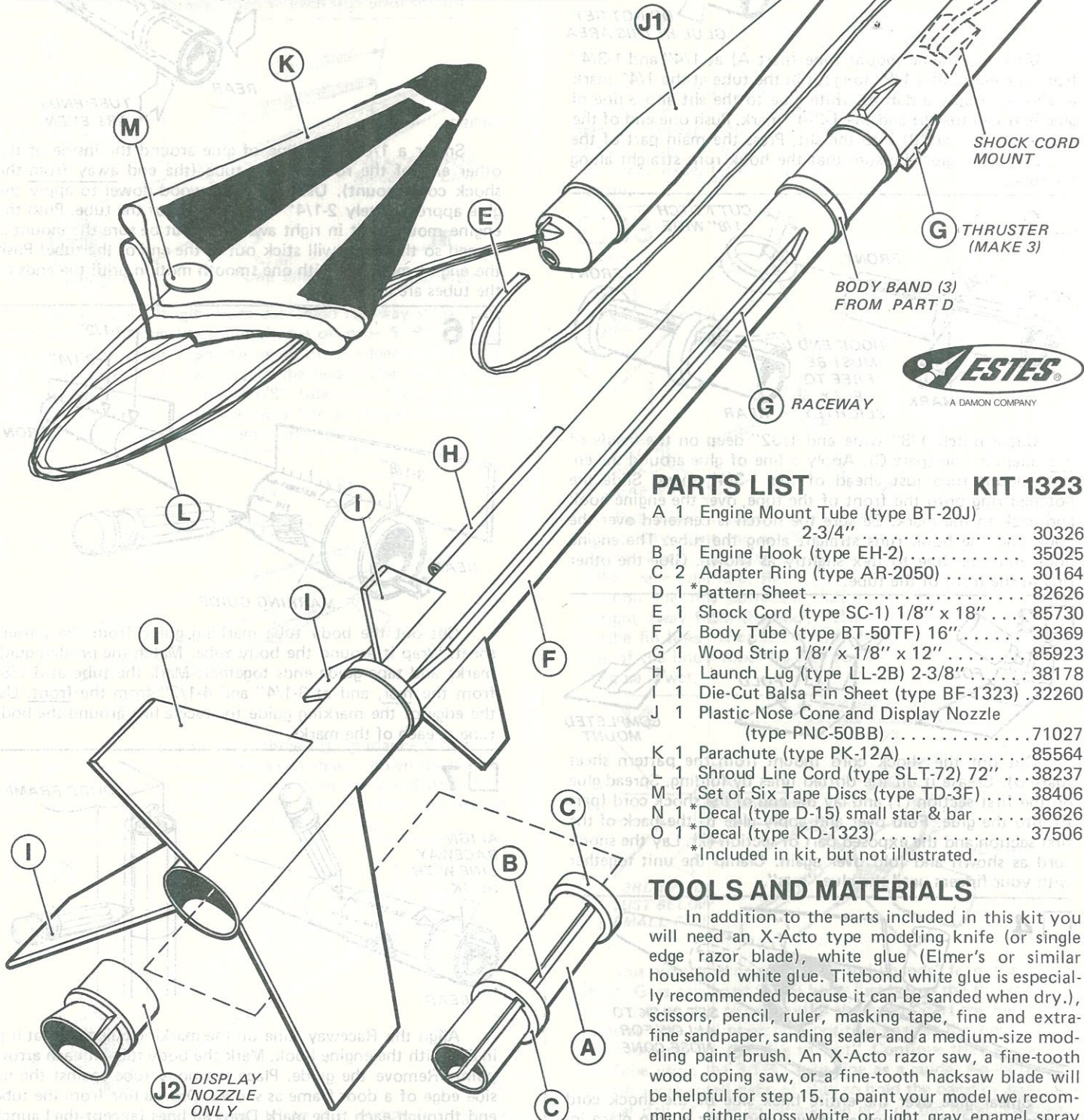
Stiletto

INTERCEPTOR MISSILE

BEFORE YOU START

Read all instructions before beginning work on your model. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any glue. If some part doesn't fit properly, sand lightly or build up as needed for precision assembly.

SKILL LEVEL 2 – Recommended for Intermediate Rocketeers



PARTS LIST KIT 1323

A	1 Engine Mount Tube (type BT-20J) 2-3/4"	30326
B	1 Engine Hook (type EH-2)	35025
C	2 Adapter Ring (type AR-2050)	30164
D	1 *Pattern Sheet	82626
E	1 Shock Cord (type SC-1) 1/8" x 18"	85730
F	1 Body Tube (type BT-50TF) 16"	30369
G	1 Wood Strip 1/8" x 1/8" x 12"	85923
H	1 Launch Lug (type LL-2B) 2-3/8"	38178
I	1 Die-Cut Balsa Fin Sheet (type BF-1323)	32260
J	1 Plastic Nose Cone and Display Nozzle (type PNC-50BB)	71027
K	1 Parachute (type PK-12A)	85564
L	1 Shroud Line Cord (type SLT-72) 72"	38237
M	1 Set of Six Tape Discs (type TD-3F)	38406
N	1 *Decal (type D-15) small star & bar	36626
O	1 *Decal (type KD-1323)	37506

*Included in kit, but not illustrated.

TOOLS AND MATERIALS

In addition to the parts included in this kit you will need an X-Acto type modeling knife (or single edge razor blade), white glue (Elmer's or similar household white glue. Titebond white glue is especially recommended because it can be sanded when dry.), scissors, pencil, ruler, masking tape, fine and extra-fine sandpaper, sanding sealer and a medium-size modeling paint brush. An X-Acto razor saw, a fine-tooth wood coping saw, or a fine-tooth hacksaw blade will be helpful for step 15. To paint your model we recommend either gloss white or light gray enamel spray paint. Copper and flat red paint are suggested for step 15.

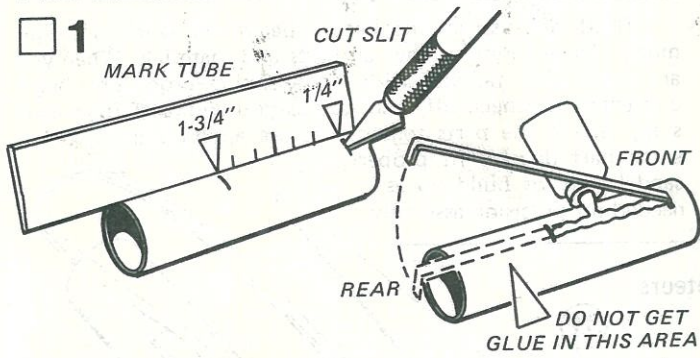
RECOMMENDED ENGINES

A8-3 B4-4 B6-4 C6-5

ESTES INDUSTRIES PENROSE, CO 81240 USA

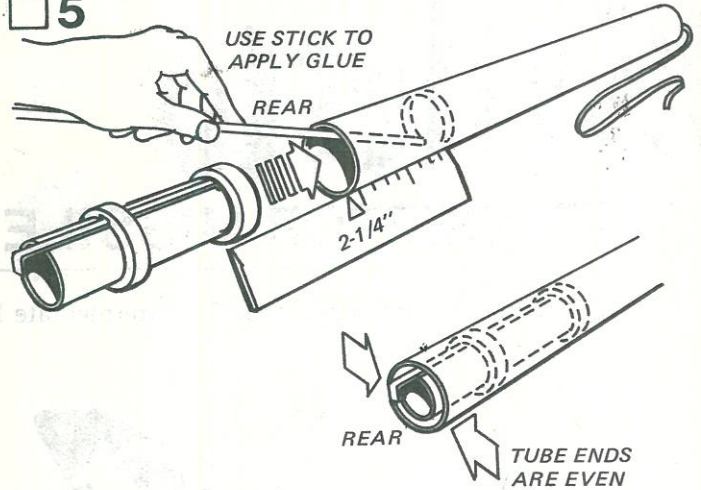
ASSEMBLY INSTRUCTIONS

1



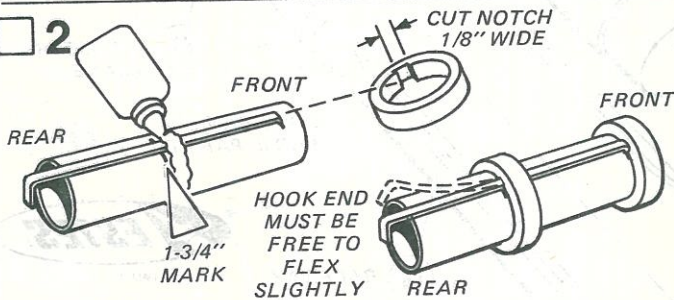
Mark the engine mount tube (part A) at 1/4" and 1-3/4" from one end. Cut a 1/8" long slit in the tube at the 1/4" mark as shown. Apply a dab of white glue to the slit and a line of glue between the slit and the 1-3/4" mark. Push one end of the engine hook (part B) into the slit. Press the main part of the hook into the glue. Be sure that the hook runs straight along the tube.

5



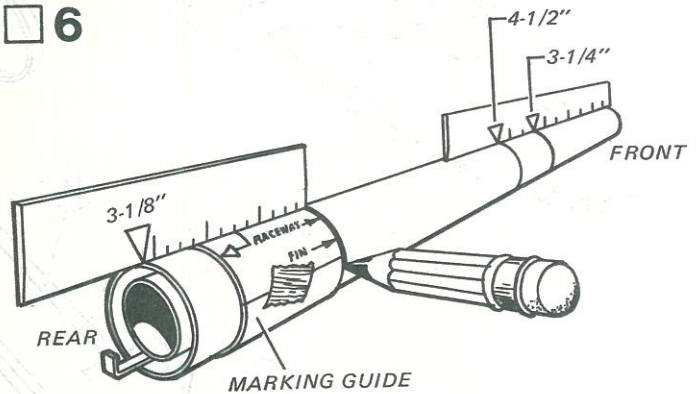
Smear a 1/8" wide line of glue around the inside of the other end of the rocket body tube (the end away from the shock cord mount). Use a stick or wood dowel to apply the glue approximately 2-1/4" from the end of the tube. Push the engine mount unit in right away - - - but be sure the mount is turned so the hook will stick out of the end of the tube! Push the engine mount in with one smooth motion until the ends of the tubes are even.

2



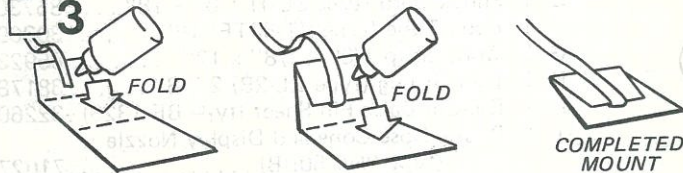
Cut a notch 1/8" wide and 1/32" deep on the inside of one adapter ring (part C). Apply a line of glue around the engine mount tube just ahead of the 1-3/4" mark. Slide the notched ring onto the front of the tube, over the engine hook and back to the mark. Be sure the notch is centered over the hook and the hook runs straight along the tube. The engine hook must be free to flex slightly as shown. Glue the other ring to the front of the tube.

6



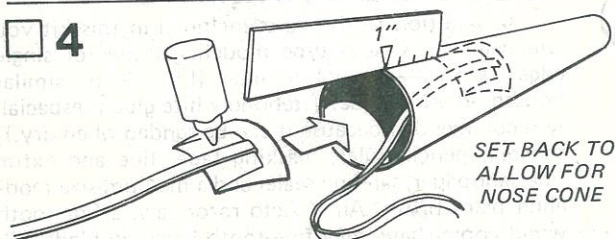
Cut out the body tube marking guide from the pattern sheet. Wrap it around the body tube. Match the printed guide marks and tape guide ends together. Mark the tube at 3-1/8" from the rear, and at 3-1/4" and 4-1/2" from the front. Use the edge of the marking guide to trace a line around the body tube at each of the marks.

3



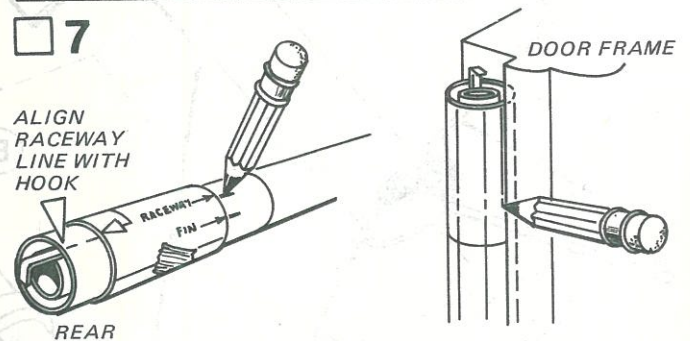
Cut out the shock cord mount from the pattern sheet (part D). Crease it on the dotted lines by folding. Spread glue on the first section (1) and lay the end of the shock cord (part E) into the glue. Fold over and apply glue to the back of the first section and the exposed part of section (2). Lay the shock cord as shown and fold over again. Clamp the unit together with your fingers until the glue "sets".

4



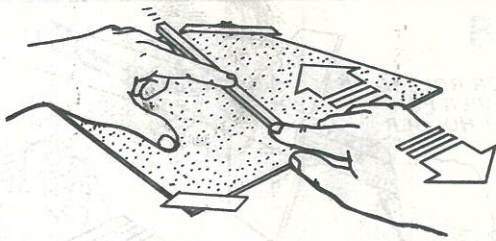
Smear glue over the entire back side of the shock cord mount. Hold the mount as shown and press it into place inside the end of the rocket body tube (part F). Make sure the front of the mount is at least 1" from the end of the tube. Hold the mount in place until the glue "sets".

7



Align the Raceway Line on the marking guide so that it is in line with the engine hook. Mark the body tube at each arrow point. Remove the guide. Place the body tube against the inside edge of a door frame as shown. Draw a line from the tube end through each tube mark. Draw all lines (except the Launch Lug Line) the entire length of the tube. Draw the launch lug line about 7-1/2" long from the tube end. Label the launch lug line and raceway line.

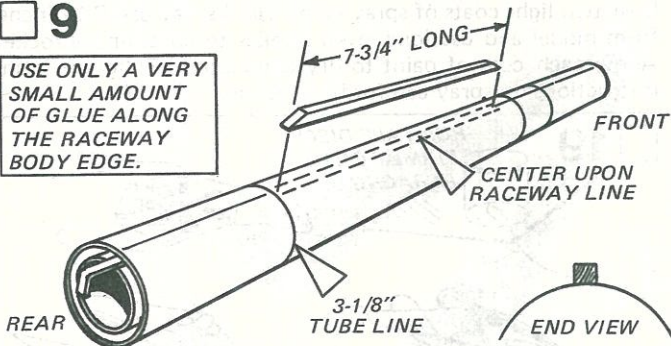
8



Fine-sand the sides of the wood raceway strip (part G). Tape a piece of extra-fine sandpaper to a flat working surface. Slide the wood strip back and forth across the sandpaper under your finger. Do this several times to each side until smooth.

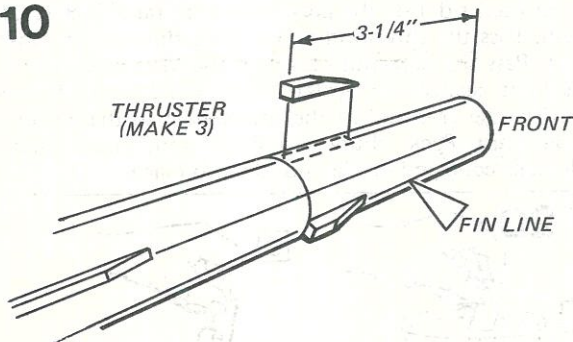
9

USE ONLY A VERY SMALL AMOUNT OF GLUE ALONG THE RACEWAY BODY EDGE.



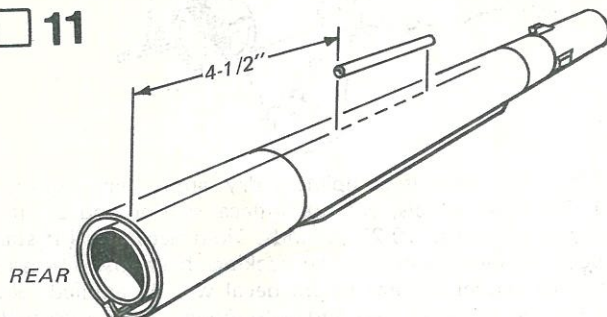
Cut a 7-3/4" length from the wood raceway strip. Sand both ends to match the shape shown on page 5. Round very slightly the two top edges. Leave all other edges square. Glue the body edge of the raceway to the body tube. Position the rear of the raceway at the 3-1/8" tube line. Press carefully into place centered on the raceway line as shown. Use a ruler to align the raceway straight along the body.

10



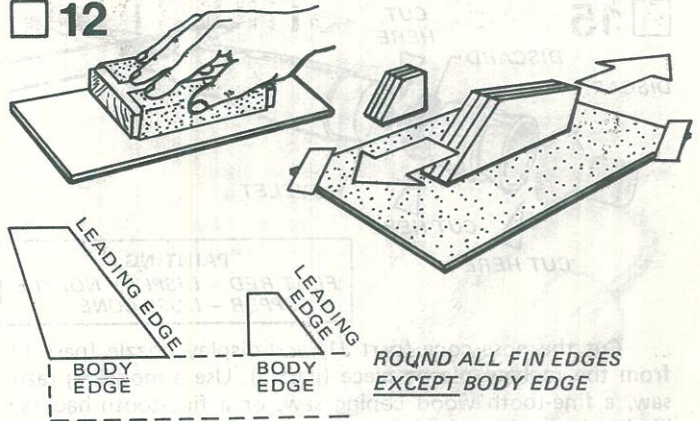
Cut out and sand to shape three (3) "guidance thrusters". For best results, first sand the angle shape shown on page 5. Then cut thruster to proper length from the wood strip. Glue one thruster centered on each fin line. Position the rear of each thruster on the 3-1/4" tube line as shown.

11



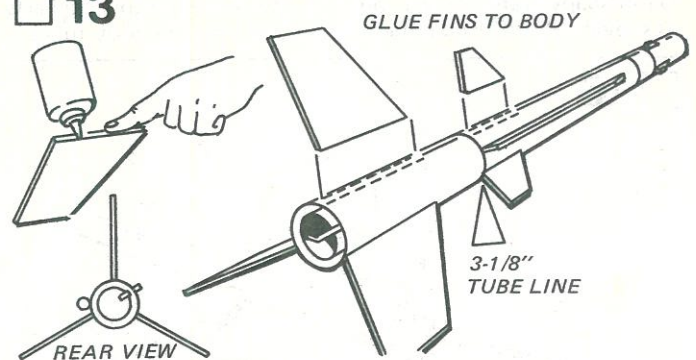
Glue the launch lug (part H) to the launch lug line on the body tube. Position the rear of the lug 4-1/2" from the rear of the body tube. Align the launch lug straight along the body.

12



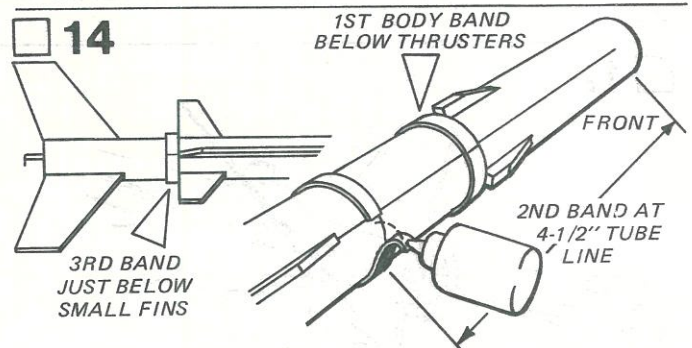
Fine-sand both sides of the balsa fin sheet (part I). Carefully remove the fins from the sheet. Use a sharp knife to cut free the corners and edges. Stack the large and small fins as shown. Sand all edges smooth and straight. Sand round all fin edges except the body edge. The body edges must be square.

13

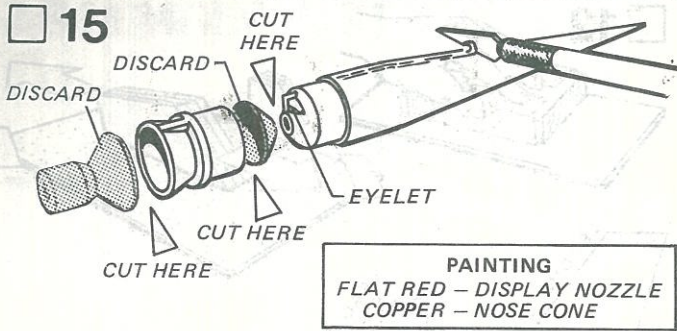


Rub a line of glue into the body edge of each fin. Allow glue to dry. Glue the small forward fins to the body tube on the fin lines. The rear of the fins should be even with the 3-1/8" rear tube line. Refer to the illustration to be sure you position the fins correctly. Adjust the fins so they project straight away from the body. Glue the large fins to the body on the fin lines. The rear of each fin should be even with the rear of the body tube. Do not set the rocket on its fins while the glue is wet.

14

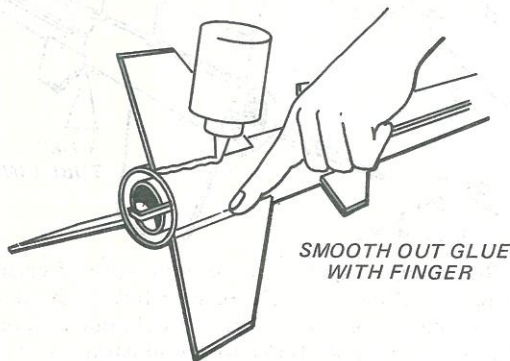


Cut out the three scale-like "body bands" from the pattern sheet. Glue one band to the body just below the thrusters. Apply a dab of glue to one end of the band. Start the band at the raceway line and press into position against the body. Wait a few moments for the glue to "set". Continue the band around the tube using the 3-1/4" tube line as a guide. Apply just one or two more small dabs of glue to hold the band in place. Use a final dab of glue to secure the end of the band. Following the same procedure, glue the second band just below the 4-1/2" tube line. Glue the third band below the small fins at the 3-1/8" tube line.



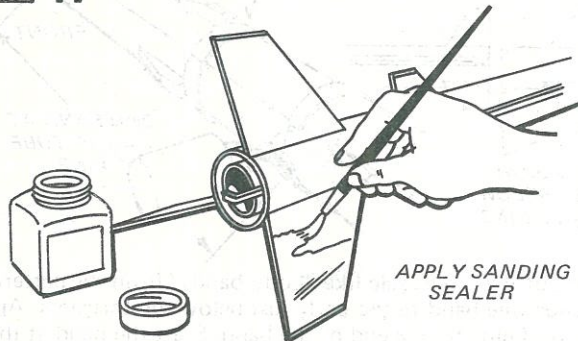
Cut the nose cone (part J1) and display nozzle (part J2) from the molded plastic piece (part J). Use a modeling razor saw, a fine-tooth wood coping saw, or a fine-tooth hacksaw blade to cut through the separation grooves as shown. Make repeated light cuts around the grooves until the parts are cut free. Work carefully to avoid tearing or scratching the plastic. Discard the two shaded sections. Trim and sand smooth all excess plastic (called "flash") from around the plastic parts. Sand smooth the cut edges of the display nozzle for neatest appearance. Remove carefully any excess plastic from inside the nose cone eyelet. Wash the nose cone and nozzle in lukewarm soapy water. Rinse well and dry. Paint the plastic parts as shown. DO NOT glue the plastic parts into the body tube.

16



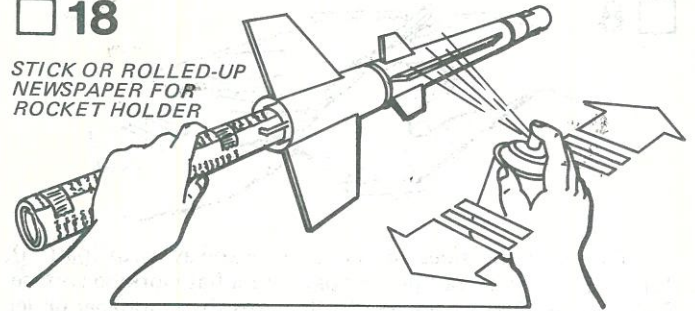
When the fin joints have dried, apply a glue reinforcement (called "glue fillet") to each fin. Hold the model level and apply a line of glue to both sides of each fin joint. Smooth out the glue with your finger. Keep the model level until the glue dries.

17



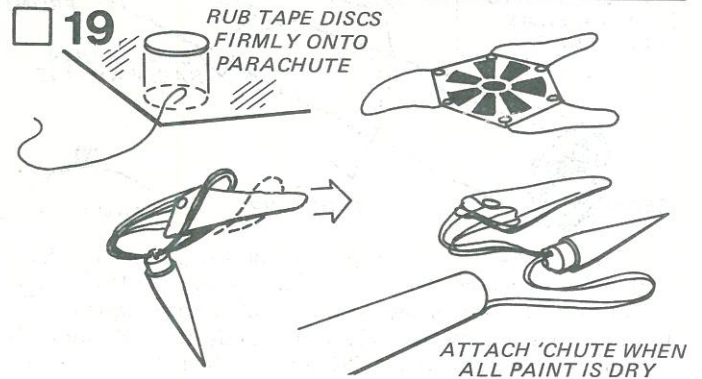
When all glue on the outside of the model is dry, prepare the balsa fins for painting. Apply at least two coats of sanding sealer to the fins, raceway, and thrusters. Let dry and sand lightly with extra-fine sandpaper between coats. Do this until the tiny grain lines in the wood are filled and everything looks and feels smooth.

18



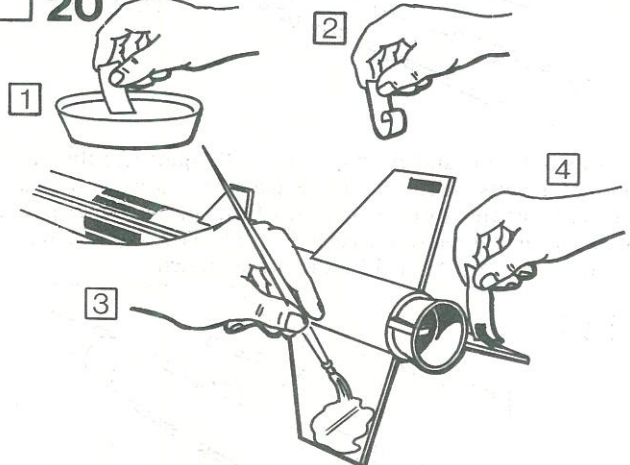
Pack the shock cord neatly into the rocket body. Paint entire rocket body either gloss white or light gray. Apply at least two light coats of spray paint. Hold spray can 8-12 inches from model and use long, even strokes to cover entire rocket. Allow each coat of paint to dry completely. Follow painting instructions on spray can for best results.

19



Cut out the parachute (part K) on its edge lines. Cut three 24" lengths of shroud line (part L). Attach line ends to the top (printed side) of the parachute with tape discs (part M) as shown. Pass the shroud line loop ends through the nose cone eyelet. Pass the parachute through the loop ends and pull the lines tight against the eyelet. "Set" the knot with a drop of glue. Tie the free end of the shock cord to the eyelet with a double knot. Pack chute and shock cord into rocket body. Slide nose cone and display nozzle into place.

20



When the paint is completely dry, apply decals (parts N & O). To apply decals, cut out a decal section and dip it in lukewarm water for 10-20 seconds. Hold decal until it starts to uncurl or slides easily on the backing sheet. Use a brush to "wet" the model surface where decal will be applied. Slide decal off the backing sheet and onto model. Blot excess water away with a damp cloth. Allow decaled model to dry overnight. Apply a final light coat of gloss clear spray enamel over decaled areas to protect the decals.