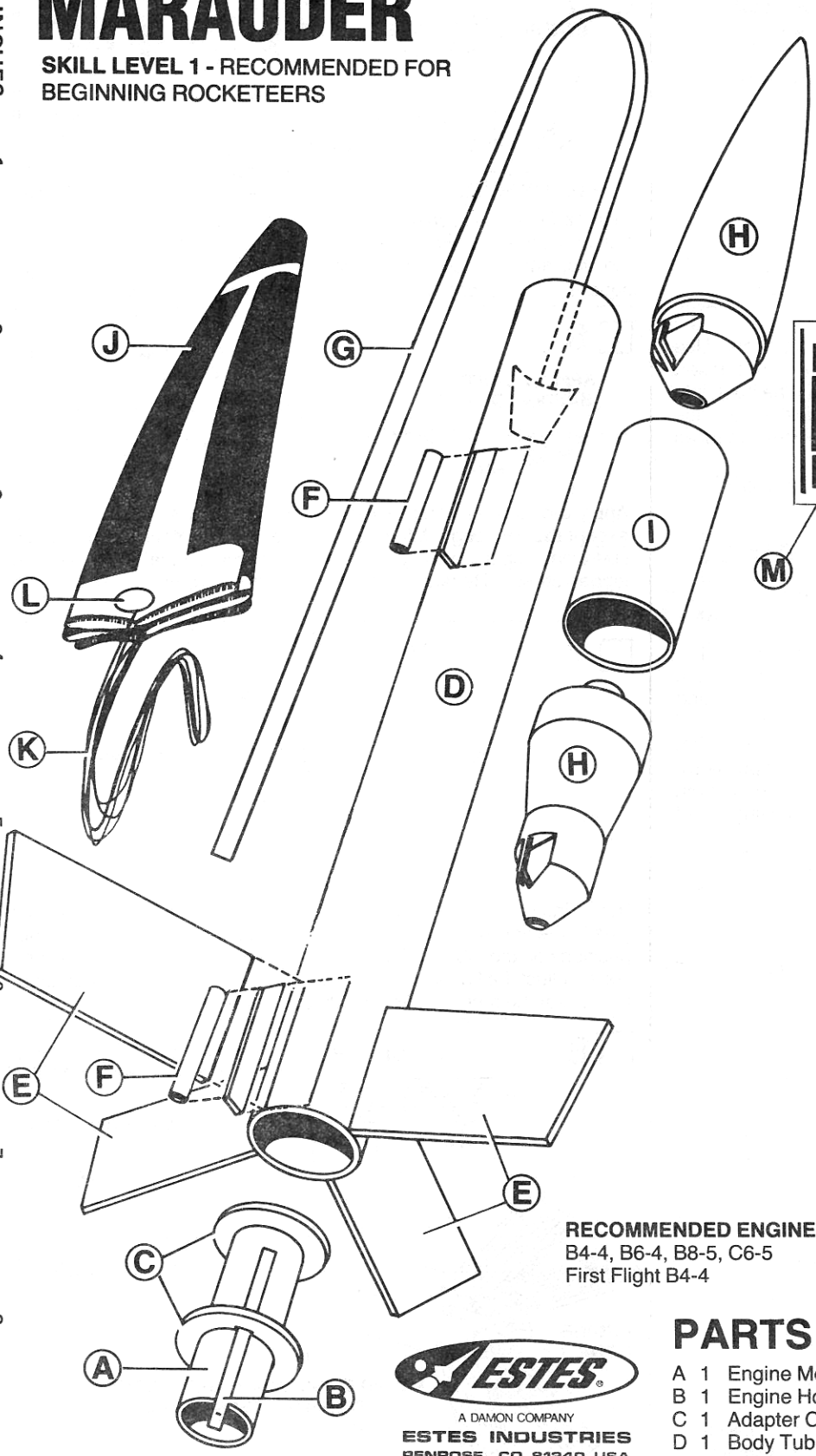
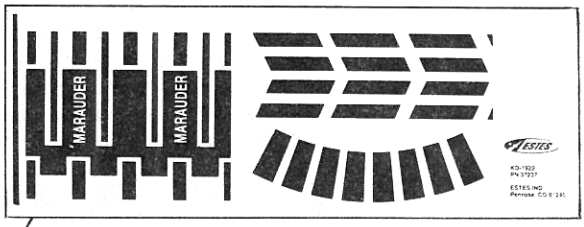
MARAUDER

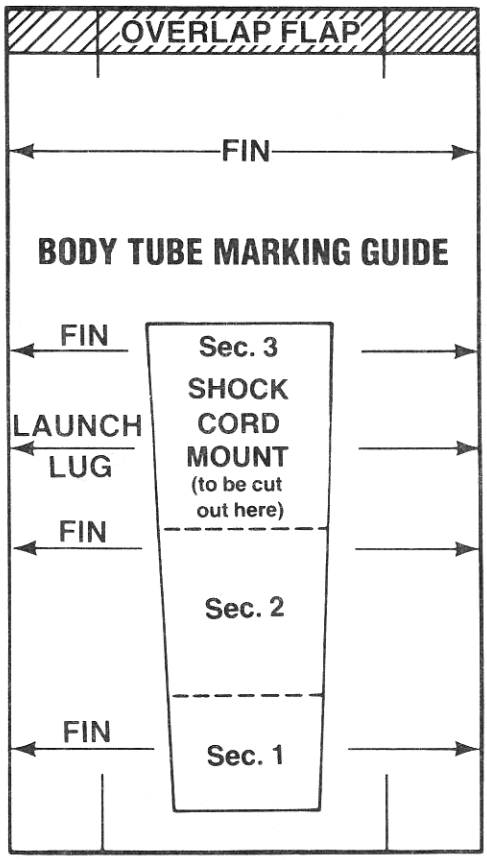
SKILL LEVEL 1 - RECOMMENDED FOR BEGINNING ROCKETEERS



BEFORE YOU START

Read each step and study the accompanying drawings before doing any of the work called for in that step. Make sure you have all parts and materials. Check off each step as you complete it. Always test-fit parts together before applying glue. It will sometimes be necessary to sand edges of rings, tubes, etc. to obtain proper fit. If you are in doubt about the relative size or location of some parts, refer back to this exploded view drawing for clarification. Adequate glue joints are very important for a flying model rocket. Follow the instructions carefully in this regard.





RECOMMENDED ENGINES:
B4-4, B6-4, B8-5, C6-5
First Flight B4-4

ESTES
A DAMON COMPANY
ESTES INDUSTRIES
PENROSE, CO 81240 USA

TOOLS AND MATERIALS

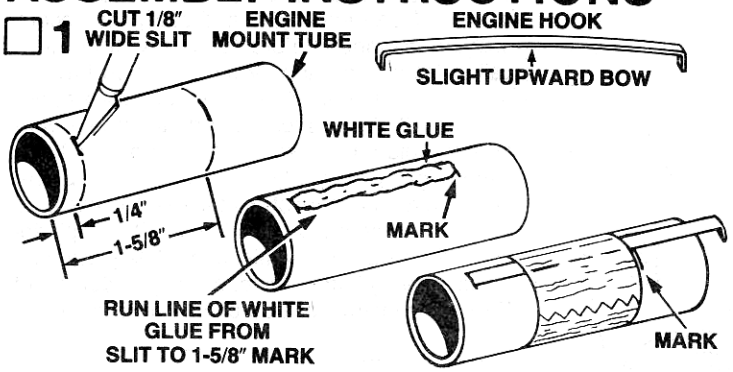
In addition to the parts included in this kit you will need: Scissors, pencil, ruler, fine or extra-fine grit sandpaper, sanding sealer, a medium-size modeling paint brush, masking tape, modeling knife with sharp blade, gloss white, red and black spray paints, and household white glue, resin glue (Elmer's, Titebond, or similar), and tube-type plastic cement. Other types of glue are not recommended.

PARTS LIST — KIT #1922

A	1	Engine Mount Tube (type BT-20J)	30326
B	1	Engine Hook (type EH-2)	35025
C	1	Adapter Centering Rings (type TA-1327)	30090
D	1	Body Tube (type BT-55KA)	30387
E	1	Die-Cut Balsa Sheet (type BF-1907)	32607
F	1	Launch Lug (type LL-2A)	38175
G	1	Shock Cord (type SC-1)	85730
H	1	Nose Cone (type PNC-60NA)	72057
I	1	Body Tube (type BT-60J)	30412
J	1	Parachute (type PK-12A)	85564
K	1	Shroud Line (type SLT-72)	38237
L	1	Tape Disc Strip (type TD-3F)	38406
M	1	Decal Sheet (type KD-1922)	37237

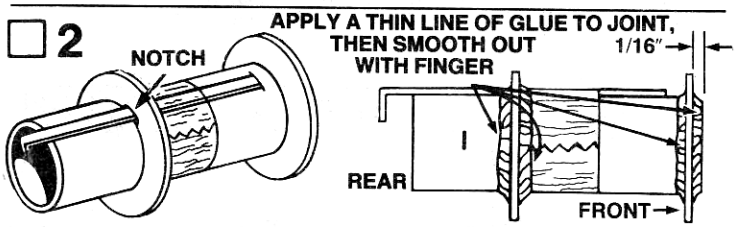
ASSEMBLY INSTRUCTIONS

☐ 1



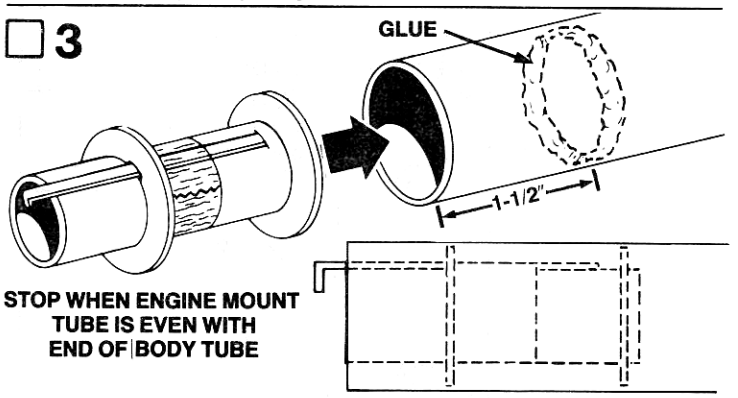
Mark the engine mount tube (part A) 1/4" and 1-5/8" from one end. Use a sharp modeling knife to cut a 1/8" wide slit at the 1/4" mark. Insert one end of the engine hook (part B) into the slit and lay the hook into the glue straight along the tube. Wrap two layers of masking tape around the hook and tube with one edge of the tape next to the mark as shown.

☐ 2



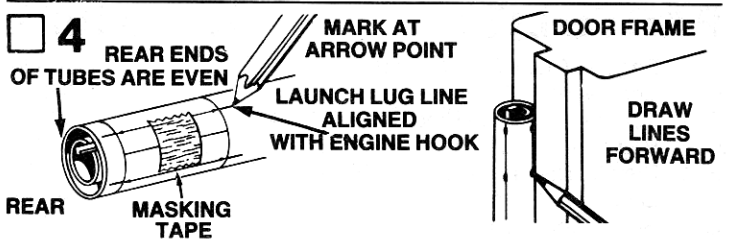
Locate the adapter centering rings (part C) and separate them from the die-cut card. Slide the notched ring onto the tube from the rear and position it so it touches the masking tape as shown. Apply a line of white glue around both sides of the ring where it touches the tube. Slide the remaining ring onto the forward end of the tube and position it about 1/16" from the end. Apply a thin line of white glue around both sides of the ring where it touches the tube. Smooth out with finger. Let this assembly dry completely.

☐ 3



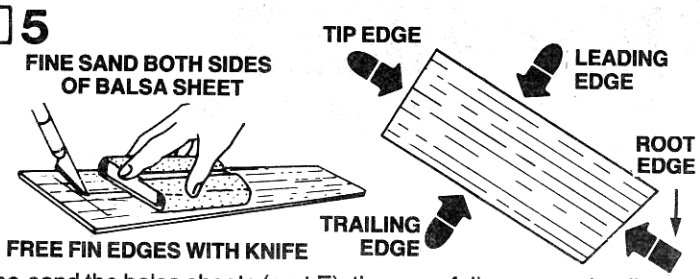
Apply a liberal amount of glue around the inside of the body tube (part D). The glue should be applied about 1-1/2" from the rear of the tube. Slide the engine mount unit into the body tube as shown until the end of the engine mount tube is even with the body end. Do not pause when pushing the mount in or the glue may "grab" at the wrong place!

☐ 4



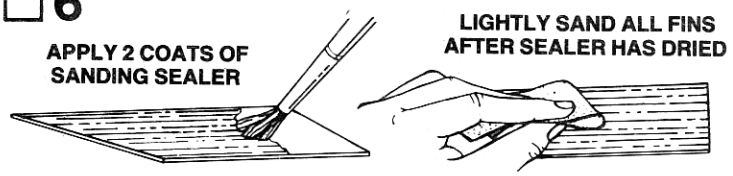
Cut out the body tube marking guide from page 1 of the instruction sheet. Wrap it around the rear of the body tube with the launch lug line in line with the engine hook. Mark the tube at each arrow point, front and rear. Draw a straight line connecting each matching front and rear mark. (Use a door sill when drawing lines.) Extend the launch lug line forward 10" (align launch lug line with engine hook).

☐ 5



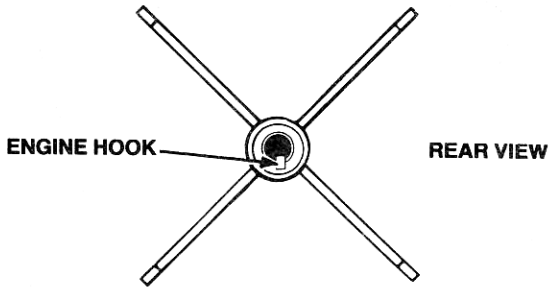
Fine-sand the balsa sheets (part E), then carefully remove the die-cut fins from the sheet. Free the edges with a sharp knife. Sand the leading, tip, and trailing edges of the fins round. Leave the root edge square. Do not discard the remaining balsa sheet just yet.

☐ 6



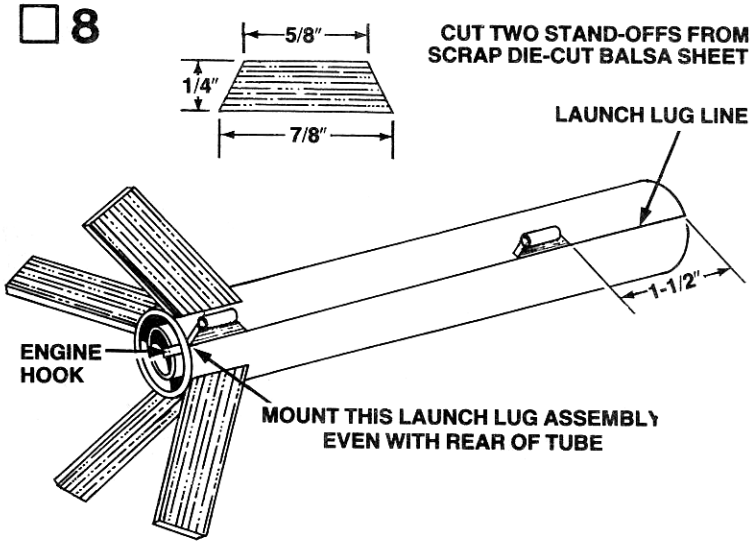
Apply a coat of sanding sealer to each fin. Apply sealer to all edges except the root edge. When sealer is dry, lightly sand all the sealed surfaces. Repeat sealing and sanding process until balsa grain no longer shows. Resand root edge, lightly, to remove any trace of sealer.

☐ 7



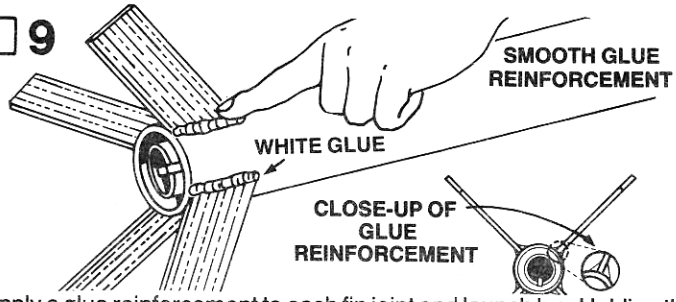
Rub a line of glue into the root edge of each fin and allow to dry. Apply glue to the fins and position fins on the alignment lines in their correct positions on the tube. Refer to the illustration to be sure of these positions. Adjust the fins so they project straight away from the body tube. Do not set the rocket on its fins while the glue is wet.

☐ 8



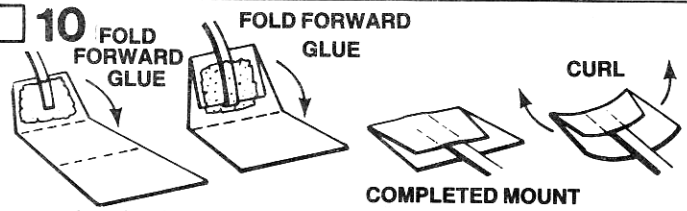
Cut two launch lug stand-offs from the remaining scrap of the die-cut fin sheet, to the dimensions shown. Use a sharp modeling knife to cut the launch lug (part F) into two 5/8" long sections. Glue the two launch lugs to the two balsa stand-offs, align them straight, and allow to dry. Now glue the two launch lug assemblies on the launch lug alignment line in the positions shown. Be sure these are mounted straight on the tube before the glue sets.

☐ 9



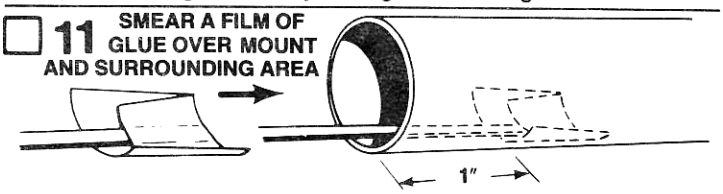
Apply a glue reinforcement to each fin joint and launch lug. Holding the model level, apply a line of glue to both sides of each joint. Smooth out the glue with your finger. Keep the model level until the glue dries.

☐ 10



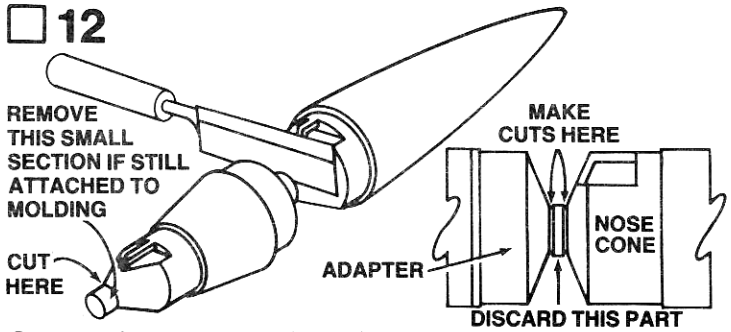
Cut out the shock cord mount from the middle of the tube marking guide. Crease it on the dotted lines by folding. Spread glue on the first section (1) and lay the end of the shock cord (part G) into the glue. Fold over and apply glue to the back of the first section and the exposed part of section 2.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

☐ 11



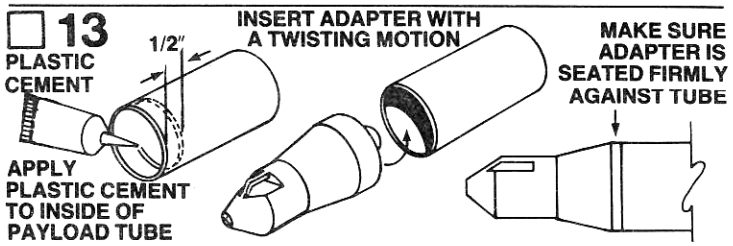
Use a stick or scrap dowel to apply a generous amount of glue inside the body tube 1" from the front of the tube. Slide the shock cord mount into the tube and press it into the glue. To insure a good bond use a stick or your finger to smear a film of glue over the mount and surrounding area in the body tube.

☐ 12



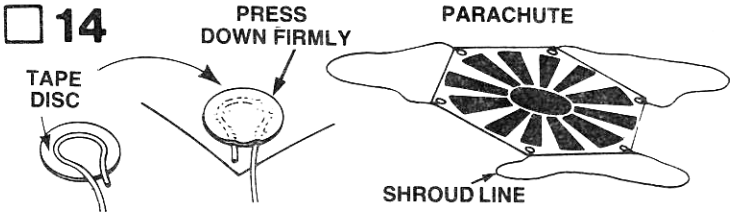
Separate the nose cone/adapter (part H) using either a sharp modeling knife or modeler's saw. Use the grooves molded into the part as cutting guides. Discard the small section of plastic removed between the two parts as it is not used. You will also need to cut away and discard the small tubular section at the base of the adapter if it has not already been removed.

☐ 13



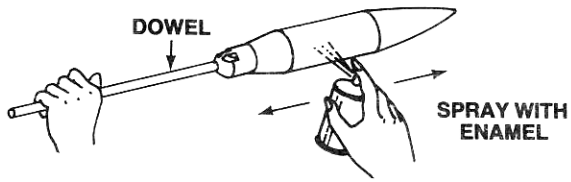
Apply a liberal amount of tube-type plastic cement around the inside of one end of the payload tube (part I). The cement should be about 1/2" from the end of the tube. Insert the adapter with a twisting motion and its shoulder is seated firmly against the payload tube end. Set aside to dry thoroughly. Cement the nose cone into the payload tube, in exactly the same manner as the adapter. Set aside to dry thoroughly.

☐ 14



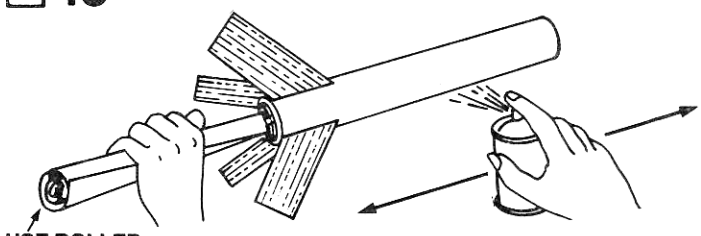
Cut out the 12" parachute (part J) on its edge lines. Cut three equal lengths of shroud line from the 72" long shroud line (part K). Attach line ends to the top of the parachute with one set of tape discs (part L) as shown. Form a small loop in the end of the shroud line. Holding the loop, gently center it inside the tape disc on the sticky-side. Then carefully press the disc onto its proper place on top of the parachute. Firmly press the tape disc into place until both the disc and parachute material are molded around the shroud line loop. Repeat for the other shroud line ends and tape discs. Set the completed parachute aside until needed in Step 19.

☐ 15



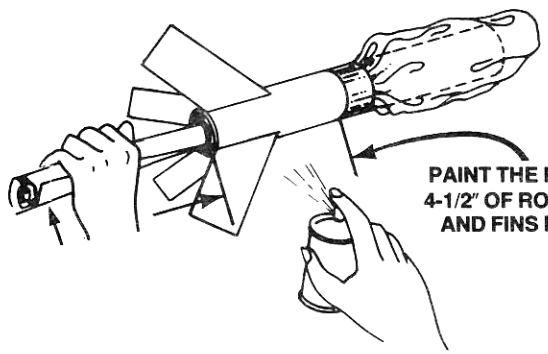
Spray paint the payload section with several light coats of gloss black paint. The payload section can be supported by a dowel or stick inserted in the center opening in the adapter while being painted and drying.

☐ 16



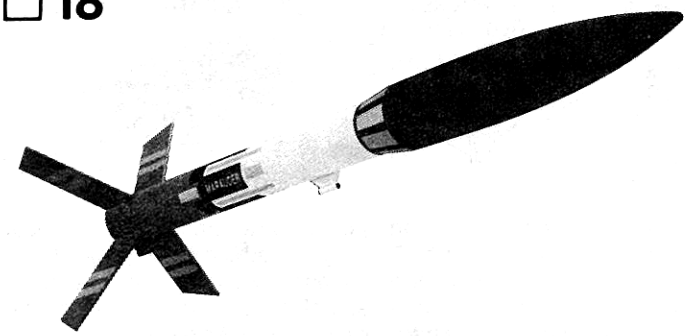
After the sanding sealer is completely dry, paint the entire rocket body and fins with gloss white spray enamel. Follow instructions on the spray can for best results. We recommend spray enamel. Do not paint the model with lacquer paint. Shake can before spraying. Hold the can straight up and spray in long smooth "strokes". Spray the model with several light, dry mist coats of paint to avoid "runs". Shake can periodically. To obtain a gloss, final coat should be applied slightly heavier. Let this coat dry overnight.

☐ 17



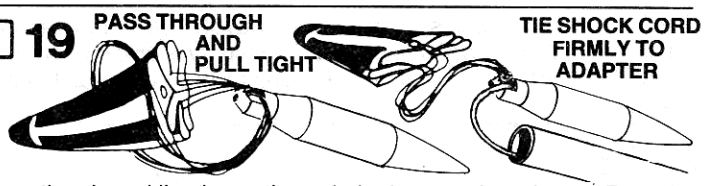
Apply masking tape and paper to cover and protect the areas which will remain white (See the panel or Decor Layout illustration.) Paint the fins and the rear of the body tube red. Carefully remove the masking tape and paper as soon as the paint is dry.

☐ 18



When all paint is dry, apply the decals (part M) in the positions shown. (A) Cut only one decal at a time from sheet. (B) Submerge decal in lukewarm water until decal slides on backing paper (usually 15 to 30 seconds). (C) Gently slide decal from backing paper onto model. (D) Move decal into exact position and carefully blot away excess water with a soft cloth. (E) If the decal "sticks" before you have it in position, apply water over the decal with a brush. This will permit the decal to be moved. (F) Smooth out all wrinkles and air bubbles before the decal dries. We recommend that the completed model be sprayed with Testor's "Gloss Cote". This is a clear spray paint that protects the model's finish.

☐ 19



Pass the shroud line loops through the loop on the adapter. Pass the parachute through the loop ends and pull the lines tight against the adapter. Tie the free end of the shock cord firmly to the adapter. Tie the free end of the shock cord firmly to the adapter loop. A square knot or strong double knot should be used. Pack parachute and shock cord into rocket body and slip adapter into place.

LAUNCHING COMPONENTS

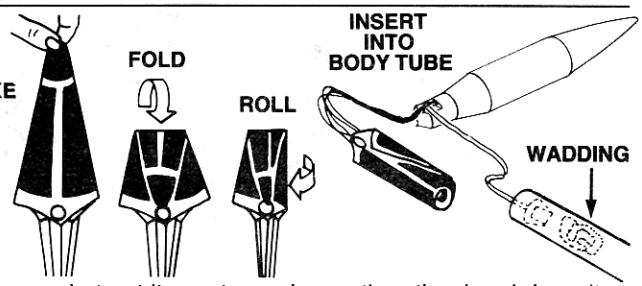
Be sure to follow the HIAA-NAR* Model Rocket Safety Code when carrying out your model rocket activities.
*HIAA—Hobby Industry of America
*NAR—National Association of Rocketry

To launch your model you will need the following items:
An Estes model rocket launch system
Parachute recovery wadding (Estes Cat. No. 2274)
Recommended Engines: B4-4, B6-4, B8-5, B8-5, C6-5.
Use an B4-4 Engine for your first flight.

COUNTDOWN CHECKLIST

T-13 Pack 4 or 5 squares of loosely crumpled recovery wadding into the body tube.

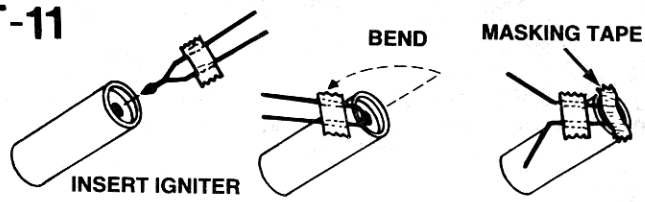
T-12



Hold the parachute at its center and pass the other hand down it to form a "spike" shape. Fold this spike in half. Roll parachute into tube shape to fit easily into body. Pack 'chute into the tube on top of the wadding. Pack the shroud lines and shock cord in on top of the parachute and slip the adapter section into place.

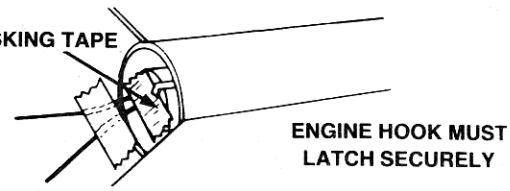
NOTE: Adapter section should separate easily from rocket body tube, but should not be extremely loose. If fit is too tight, sand inside of body tube and shoulder of adapter with fine sandpaper. If fit is too loose, add a wrapping of transparent tape to the shoulder of the adapter.

T-11



Select an engine and install an igniter as directed in the engine instructions. Use a B4-4 engine for your first flight.

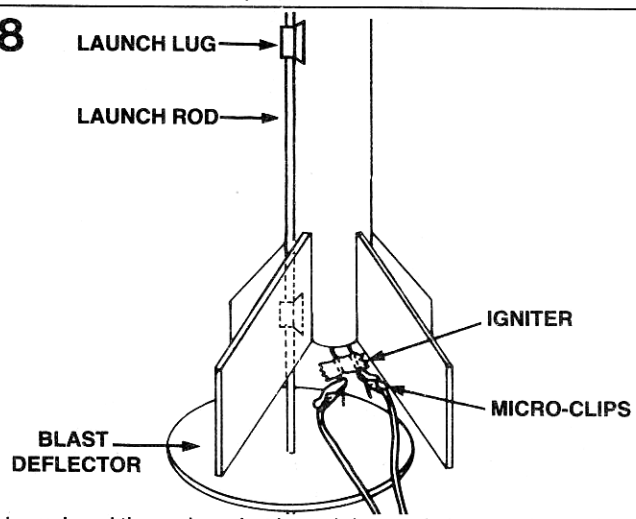
T-10



Insert engine into rocket engine mount. Engine hook must latch securely over end of the engine.

T-9 Disarm the launch panel—REMOVE SAFETY KEY!

T-8



Slide launch rod through rocket launch lug and place rocket on launch pad. Make sure the rocket slides freely on the launch rod. Clean the micro-clips and attach them to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.

T-7 Clear the launch area. Alert recovery crew and trackers. Check for low flying aircraft and unauthorized persons in the recovery area.

T-6 Arm the launch panel—INSERT SAFETY KEY!

5-4-3-2-1-LAUNCH!!

Repeat Countdown Checklist for each flight.

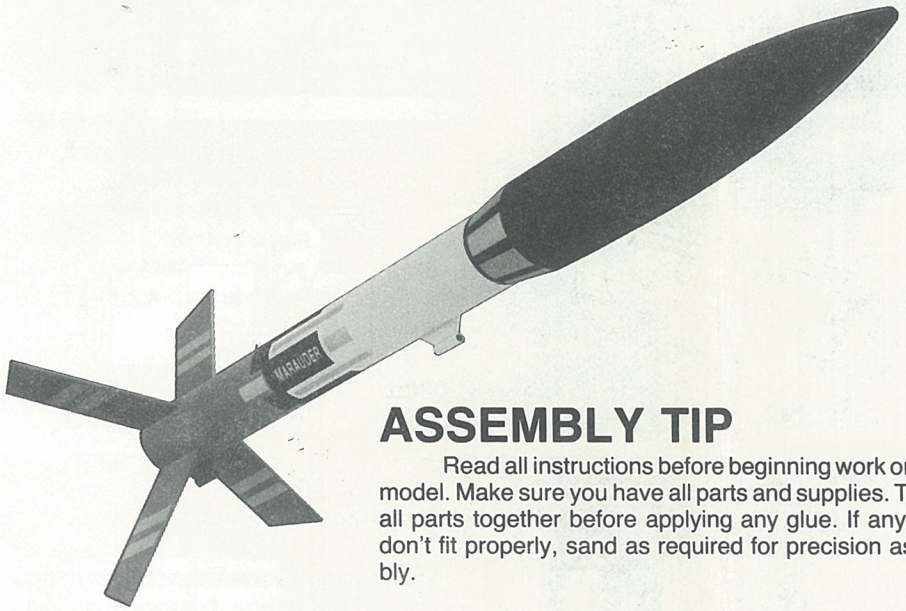
MISFIRE PROCEDURE

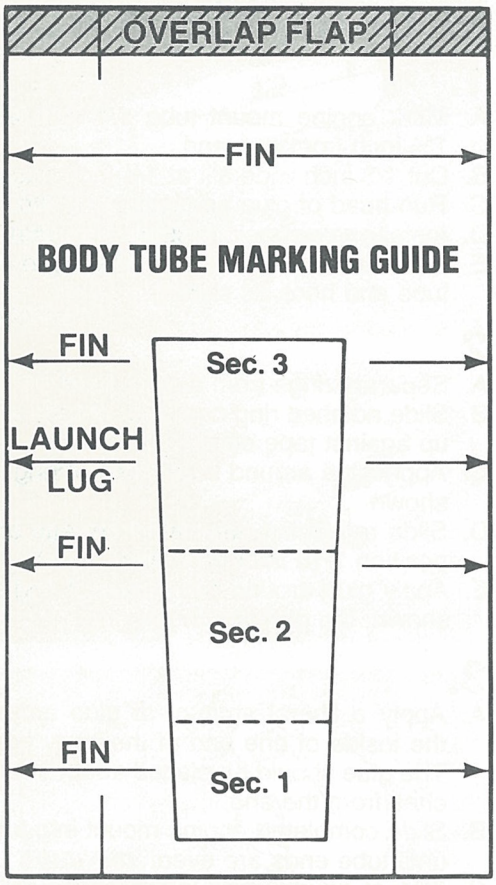
Disarm the launch panel. Wait one minute before approaching the rocket on the launch pad. Remove the rocket, clean the igniter residue from the nozzle of the engine, and carefully install a new igniter. Repeat the Countdown Checklist.

Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.

A DAMON COMPANY
ESTES INDUSTRIES
1295 H STREET
PENROSE, CO 81240 USA

MARAUDER #1922



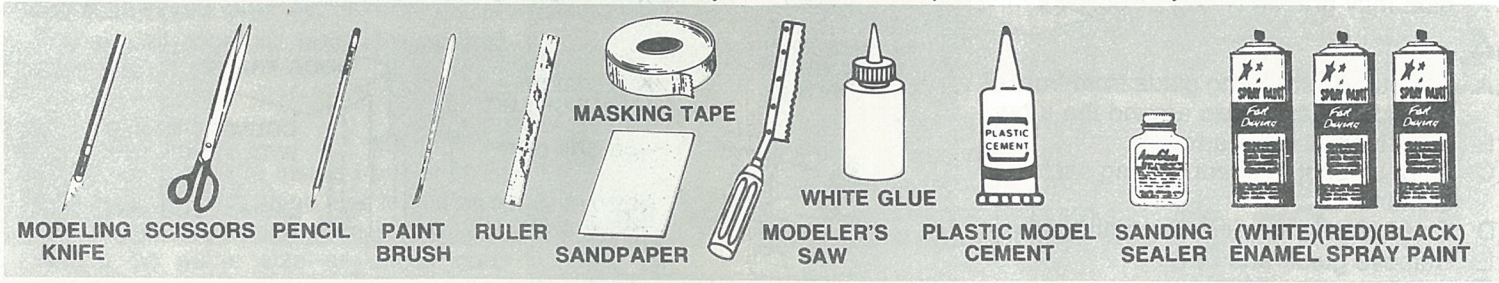


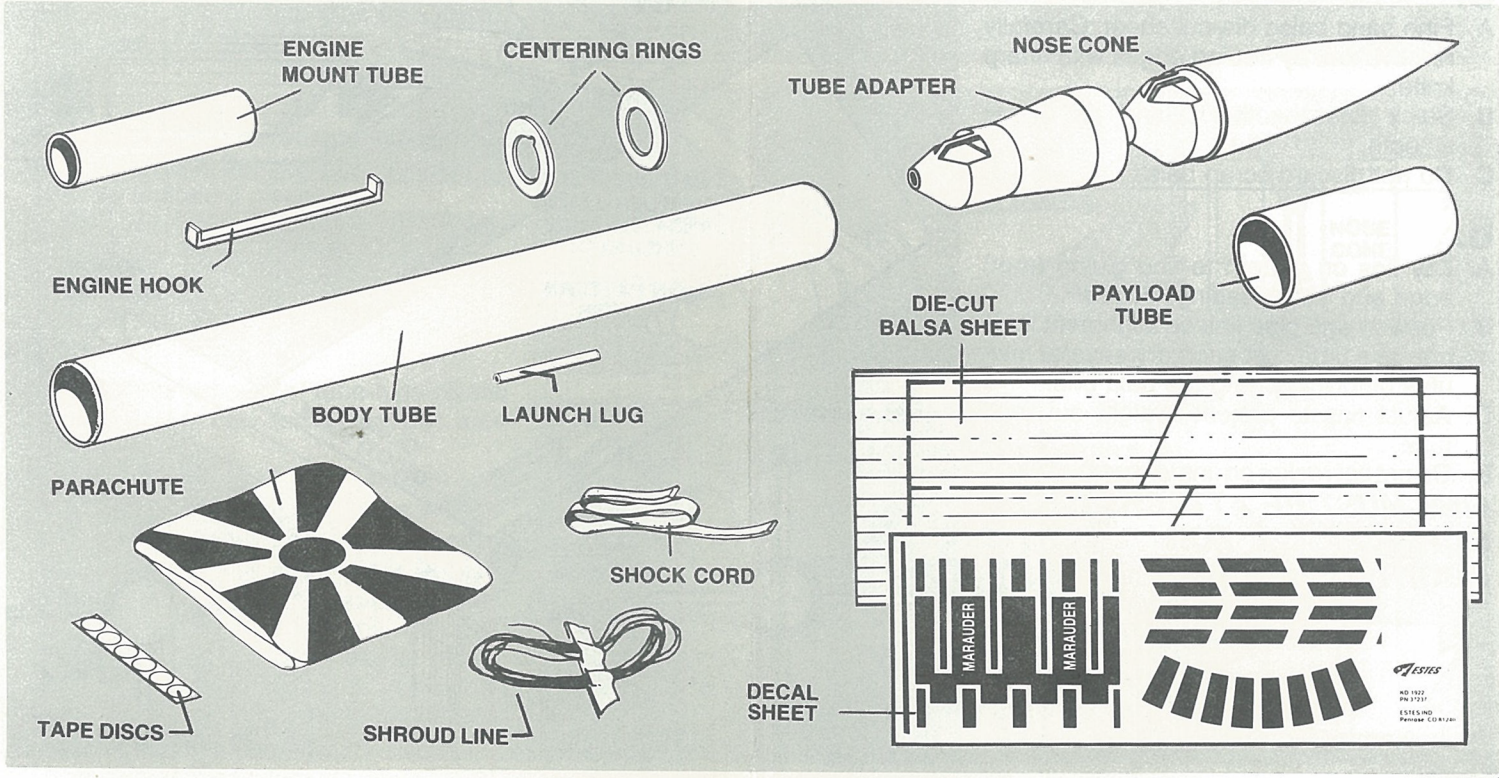
ASSEMBLY TIP

Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

PARTS AND SUPPLIES

Locate the parts shown below and lay them out on the table in front of you. In addition to the parts included in the kit you will also need:

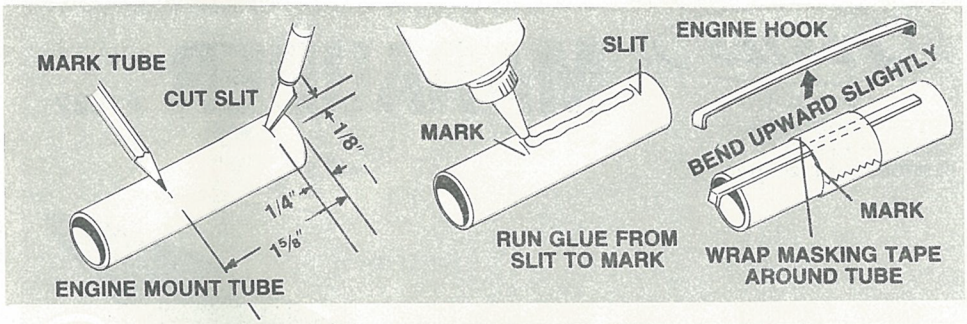




ROCKET ASSEMBLY

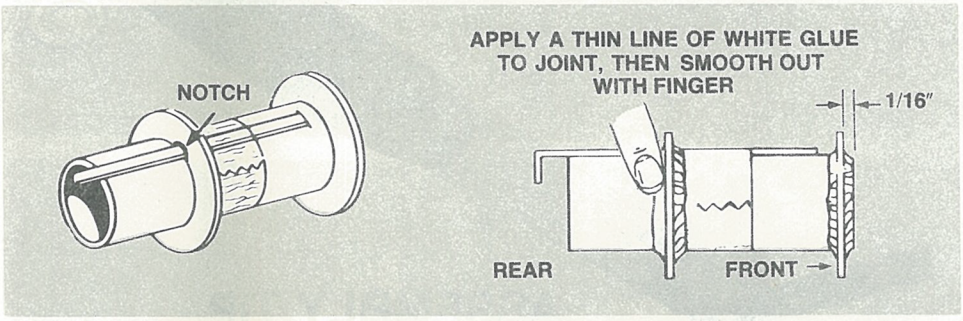
1.

A. Mark engine mount tube 1/4 inch and 1⅝ inch from one end.
B. Cut 1/8 inch wide slit at 1/4 inch mark.
C. Run bead of glue on tube as shown.
D. Install engine hook in slit and onto glue.
E. Wrap two layers of masking tape around tube and hook as shown.



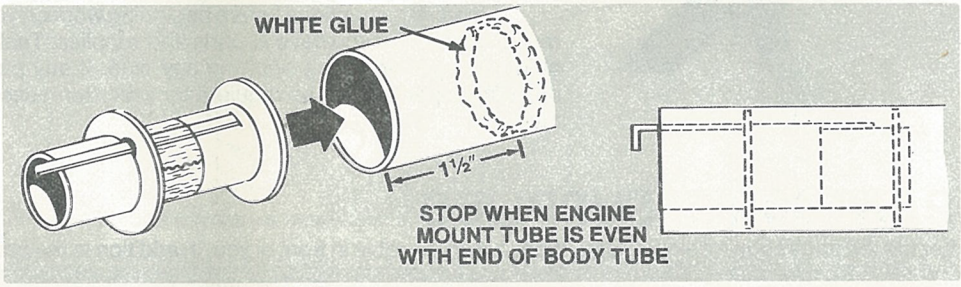
2.

A. Separate rings from die-cut card.
B. Slide notched ring onto rear of tube and up against tape edge.
C. Apply glue around both sides of ring as shown.
D. Slide remaining ring onto front end and position 1/16 inch from end.
E. Apply glue around both sides of ring as shown. Let glue dry thoroughly.



3.

A. Apply a liberal amount of glue around the inside of one end of the body tube. The glue should be placed about 1½ inches from the end.
B. Slide completed engine mount into tube until tube ends are even.
C. Do not pause while installing mount or glue may grab in wrong place.



4.

A. Cut out tube marking guide from front of instructions and wrap around the tube.
B. Mark tube at each arrow.
C. Draw straight lines connecting each pair of marks.
D. Extend launch lug line full length of tube.
E. Remove guide and save.

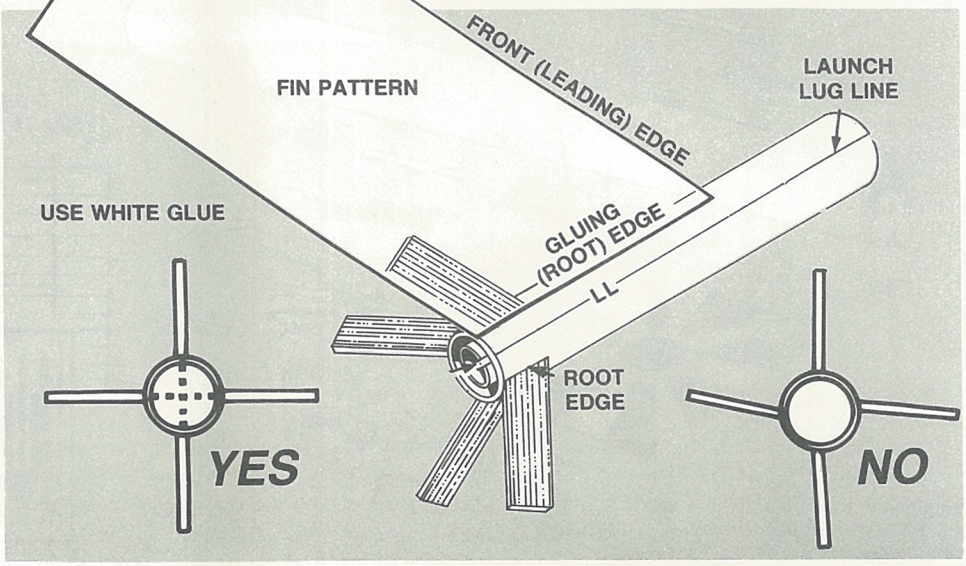
5.

A. Fine sand balsa die-cut sheet. Carefully remove fins by freeing edges with sharp knife.
B. Stack fins together. Sand all edges smooth.
C. Do not discard scrap balsa.

6.

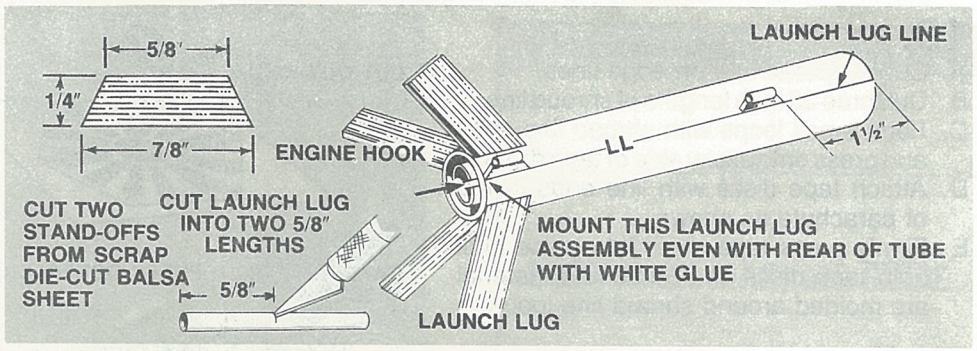
A. Lay fins on pattern to find gluing (root) edge and front (leading) edges.
B. Position and glue fins on alignment lines one at a time. Let each dry several minutes before applying the next one.
C. Adjust fins to project straight out from tube.
D. Do not set rocket on fins while glue is wet.

FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!



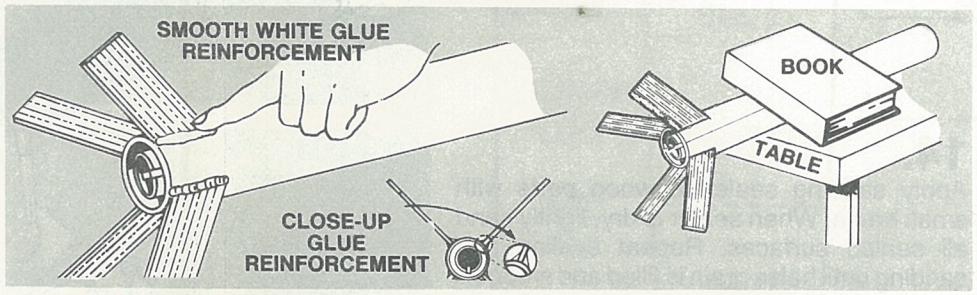
7.

A. Cut two launch lug stand-offs from scrap balsa to dimensions shown.
B. Use modeling knife to cut launch lug into two 5/8 inch lengths.
C. Glue launch lugs onto balsa stand-offs. Make sure they are straight, and allow glue to dry.
D. Glue stand-offs into position on body tube as shown. Check to be sure these are straight.



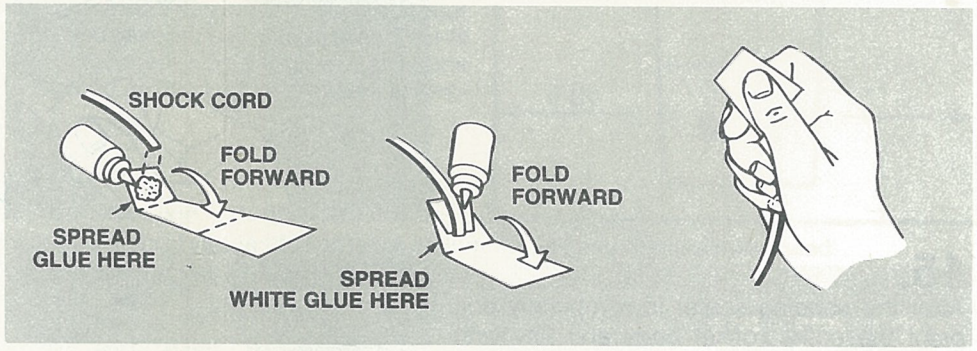
8.

A. Apply a glue reinforcement to each fin/body tube joint and each side of launch lug stand-offs.
B. Support rocket as shown until glue dries.



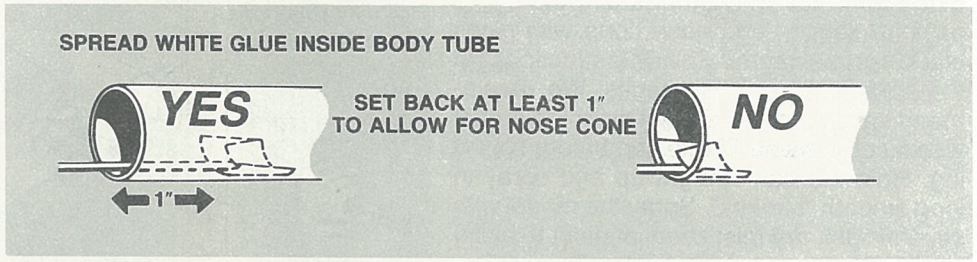
9.

A. Cut shock cord mount from center of marking guide.
B. Crease on dotted lines by folding. Spread glue on section 1 and lay end of shock cord into glue. Fold over and apply glue to back of first section and exposed part of section 2. Lay shock cord as shown and fold mount over again.
C. Clamp unit together with fingers until glue sets.



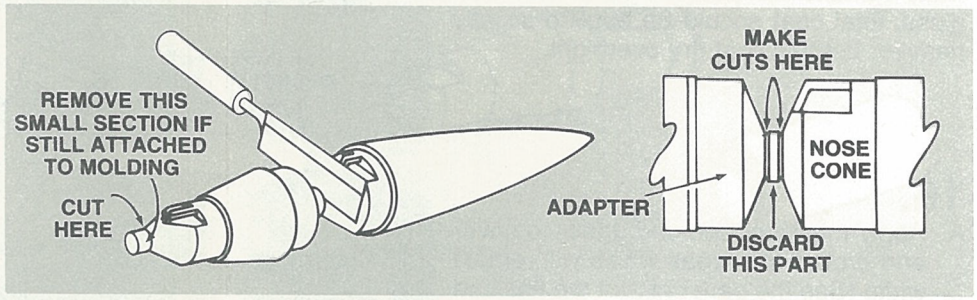
10.

A. Apply white glue to inside front of body tube to cover an area no less than 1 inch to 2 inches from end. The glued area should be same size as shock cord mount.
B. Press mount firmly into glue as shown.
C. Hold until glue sets.



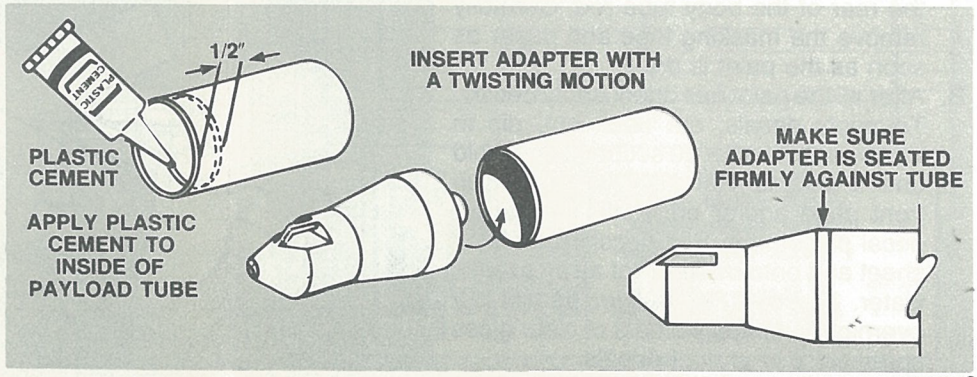
11.

A. Separate nose cone/adapter using modeler's saw or knife.
B. Discard indicated pieces.



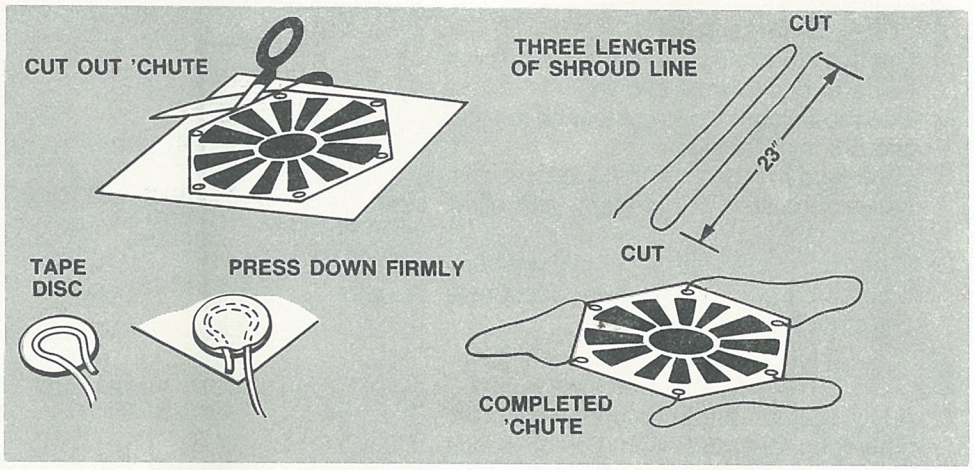
12.

A. Apply liberal amount of tube-type plastic cement inside one end of payload tube as shown.
B. Insert adapter with twisting motion until shoulder is seated against tube end.
C. OPTIONAL: Cement nose cone in other end of payload tube in same manner and allow to dry. If nose cone is cemented in place, payload area cannot be used. If not cemented in place, make sure nose cone has a good friction fit in payload tube. Apply masking tape to shoulder of nose cone if necessary.



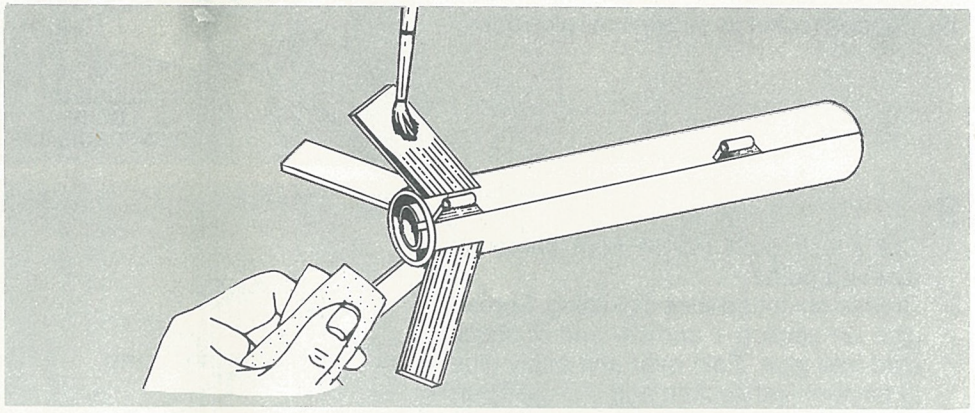
13.

A. Cut out parachute on edge lines.
B. Cut three 23 inch lengths of shroud line.
C. Form small loops with shroud line ends and press onto sticky side of tape discs.
D. Attach tape discs with line ends to top of parachute as shown.
E. Firmly press tape discs into place until both tape discs and parachute material are molded around shroud line loops.



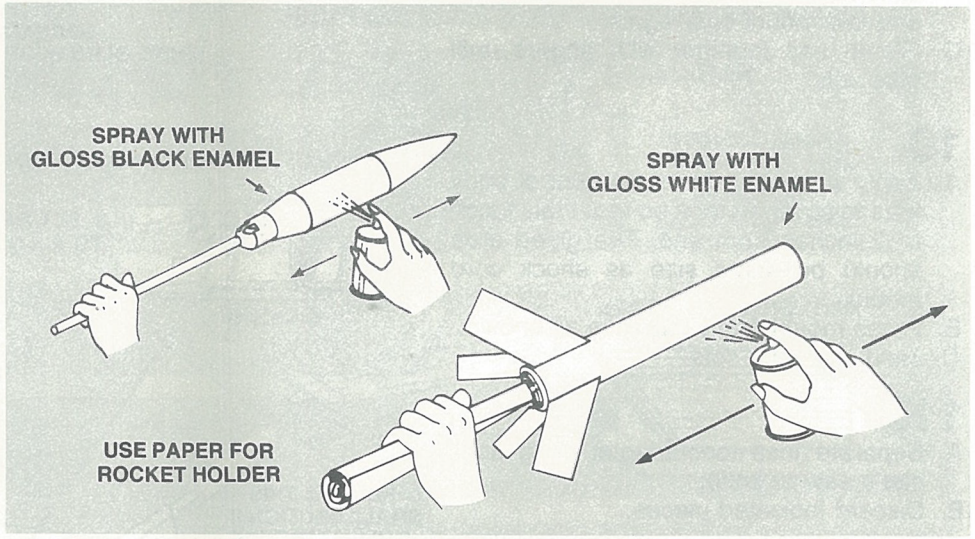
14.

Apply sanding sealer to wood parts with small brush. When sealer is dry, lightly sand all sealed surfaces. Repeat sealing and sanding until balsa grain is filled and smooth.



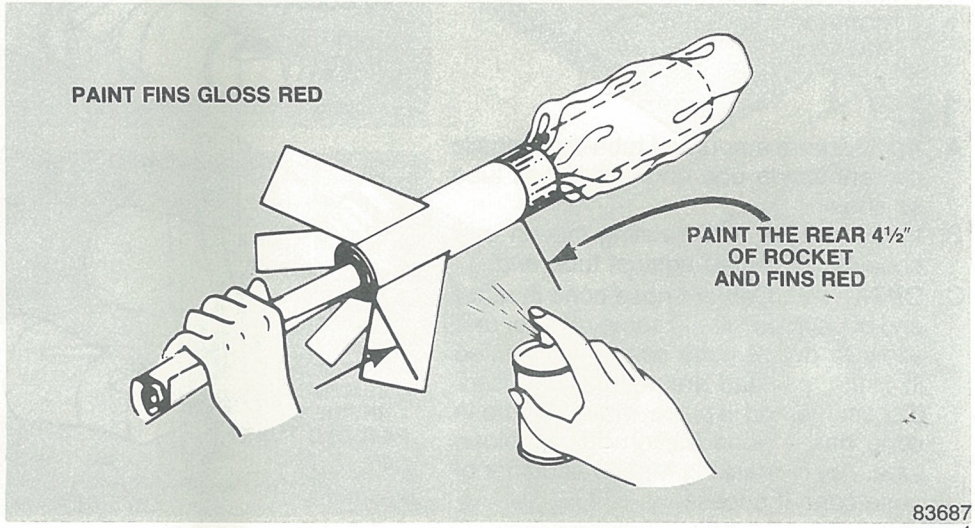
15.

After the sanding sealer is completely dry, paint the entire rocket body and fins with gloss white spray enamel. Paint the entire payload section and nose cone with gloss black spray enamel. Follow instructions on the spray can for best results. We recommend spray enamel. Do not paint the model with lacquer paint. Shake can before spraying. Hold the can straight up and spray in long smooth "strokes". Spray the model with several light, dry mist coats of paint to avoid "runs". Shake can periodically. To obtain a gloss, final coat should be applied slightly heavier. Let this coat dry overnight.



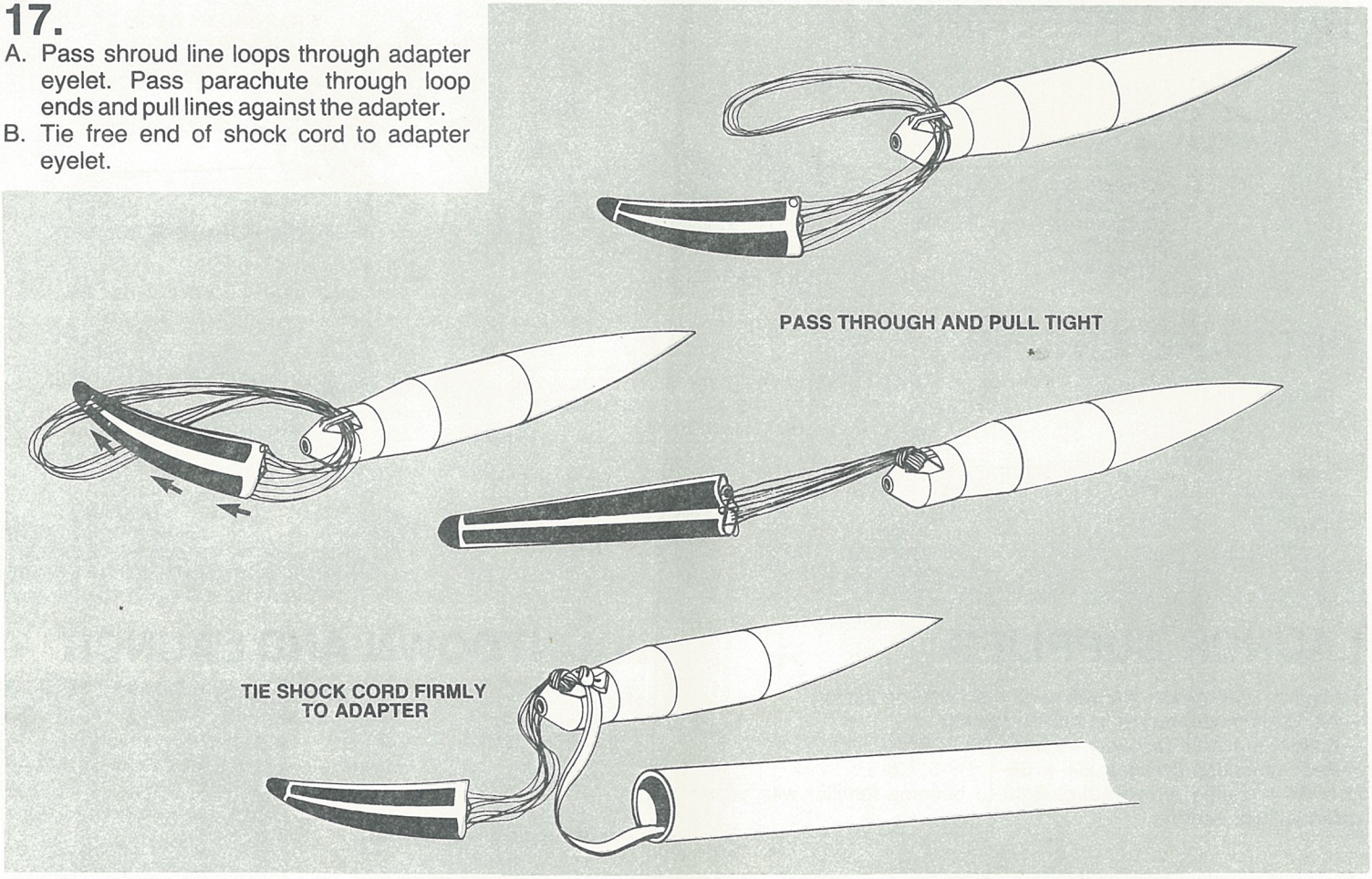
16.

A. Apply masking tape and paper to cover and protect the areas which will remain white (See the panel.) Paint the fins and the rear of the body tube red. Carefully remove the masking tape and paper as soon as the paint is dry.
B. After all the paint has dried, apply decals. To apply decals, cut each out, dip in lukewarm water for 20 seconds, and hold until it uncurls. Refer to photograph on front page and/or on front of panel for decal placement. Slip decal off backing sheet and onto model. Blot away excess water. For best results, let decals dry overnight and apply a coat of clear gloss spray paint to protect decals.



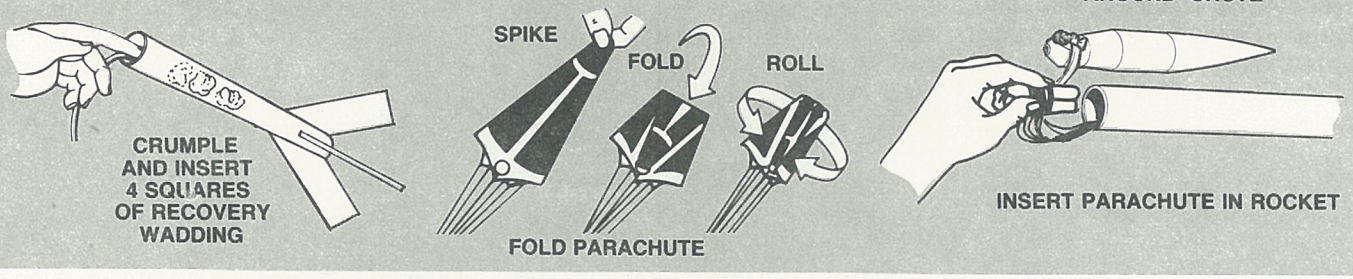
17.

A. Pass shroud line loops through adapter eyelet. Pass parachute through loop ends and pull lines against the adapter.
B. Tie free end of shock cord to adapter eyelet.

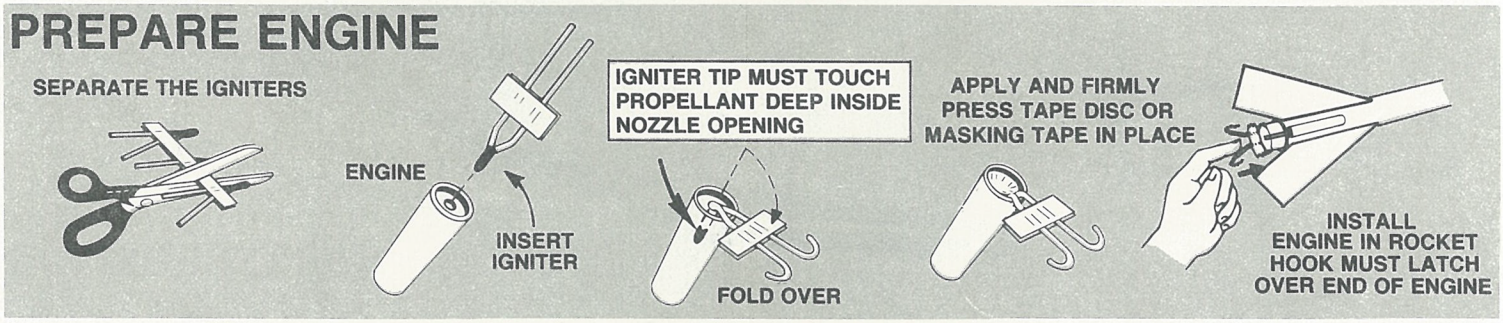


CONSTRUCTION NOTES:

ROCKET PREFLIGHT



PREPARE ENGINE



LAUNCH SUPPLIES

To launch your rocket you will need the following items:
—An Estes model rocket launching system
—Estes Parachute recovery wadding (No. 2274)
—Recommended Engines: B4-4, B6-4, B8-5, C6-5
Use B4-4 engine for your first flight to become familiar with your rocket's flight pattern.

FLYING YOUR ROCKET

Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 250 feet square. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great.

Launch area must be free of dry weeds and brown grass.

Launch only during calm weather with little or no wind and good visibility.

Don't leave parachute packed more than a minute or so before launch during cold weather [colder than 40° Fahrenheit (4° Celsius)]

MISFIRES

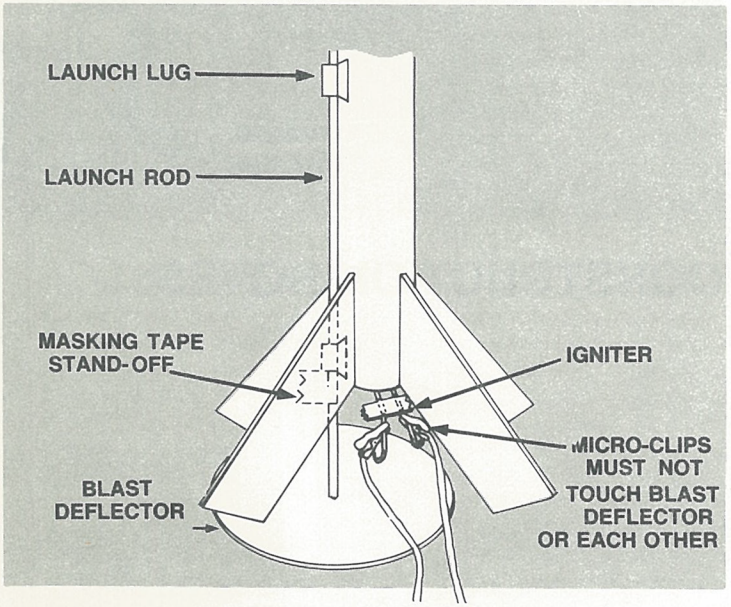
Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.

FOR YOUR SAFETY AND ENJOYMENT

Always follow the NAR-HIA* MODEL ROCKETRY SAFETY CODE while participating in any model rocketry activities.

*National Association of Rocketry–The Hobby Industry of America

COUNTDOWN AND LAUNCH



(5) REMOVE SAFETY KEY to disarm the launch controller.

(4) Remove safety cap and slide launch lugs over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.

(3) Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.

(2) Move back from your rocket as far as launch wire will permit, (at least 15 feet).

(1) INSERT SAFETY KEY to arm the launch controller.

LAUNCH!!! **PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES**

Remove safety key—Replace cap on rod.

3/32”

300 DPI

3/32”

300 DPI

A DAMON COMPANY

NAR/HIAA Model Rocketry Safety Code

1. CONSTRUCTION — My model rockets will be made of lightweight materials such as paper, wood, plastic and rubber, without any metal as structural parts.

2. ENGINES — I will use only pre-loaded factory made NAR safety certified model rocket engines in the manner recommended by the manufacturer. I will not change in any way nor attempt to reload these engines.

3. RECOVERY — I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.

4. WEIGHT LIMITS — My model rocket will weigh no more than 453 grams (16 ozs.) at liftoff, and the engines will contain no more than 113 grams (4 ozs.) of propellant.

5. STABILITY — I will check the stability of my model rockets before their first flight, except when launching models of already proven stability.

6. LAUNCHING SYSTEM — The system I use to launch my model rockets must be remotely controlled and electrically operated, and will contain a switch that will return to "off" when released. I will remain at least 15 feet away from any rocket that is being launched.

7. LAUNCH SAFETY — I will not let anyone approach a model rocket on a launcher until I have made sure that either the safety interlock key has been removed or the battery has been disconnected from my launcher.

8. FLYING CONDITIONS — I will not launch my model rocket in high winds, near buildings, power lines, tall trees, low flying aircraft, or under any conditions which might be dangerous to people or property.

9. LAUNCH AREA — My model rockets will always be launched from a cleared area, free of any easy to burn materials, and I will only use flame resistant recovery wadding in my rockets.

10. JET DEFLECTOR — My launcher will have a jet deflector device to prevent the engine exhaust from hitting the ground directly.

11. LAUNCH ROD — To prevent accidental eye injury I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use I will always store it so that the launch rod is not in an upright position.

12. POWER LINES — I will never attempt to recover my rocket from a power line or other dangerous place.

13. LAUNCH TARGETS & ANGLES — I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

14. PRE-LAUNCH TEST — When conducting research activities with unproven designs or methods, I will when possible, determine their reliability through pre-launch tests. I will conduct launchings of unproven designs in complete isolation from persons not participating in the actual launching.

As a member of the Estes Model Rocketry Program, I promise to faithfully follow all rules of safe conduct as established in the above code.

Signed _____

(Keep this Code in your Range Box.)

IMPORTANT!

PLEASE READ AND BECOME FAMILIAR WITH THE MODEL ROCKETRY SAFETY CODE ON THIS CARD. PLEASE SIGN WHERE INDICATED AND KEEP THIS CODE WITH YOU DURING ALL YOUR MODEL ROCKETRY ACTIVITIES

CAUTION: WARNING: for your safety DO NOT alter, dismantle, or unwrap model rocket engines or their ingredients in any way. Soak unwanted engines in water to destroy.

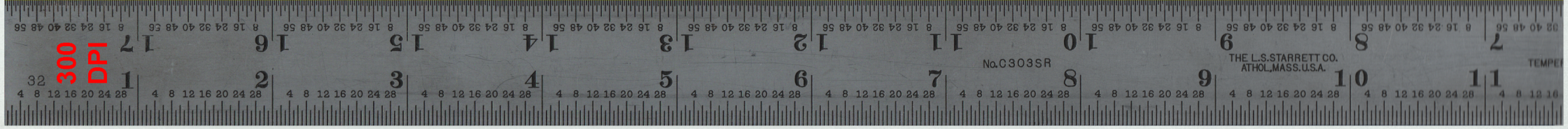
FULL ONE YEAR WARRANTY

Your Estes product is warranted against defects in materials or workmanship for one year from the date of the original purchase. Any Estes product which, because of a manufacturing mistake, malfunctions or proves to be defective within the one-year warranty period will be repaired or replaced, at Estes' option and at no charge to you, provided it is returned to Estes with proof of purchase.

This warranty does not cover incidental or consequential damage including injury or damage to persons or property caused by the use, abuse, misuse, failure to comply with operating instructions or improper storage of the warranted product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

For repair or replacement under this warranty, please return the defective part of your Estes product with proof of purchase to: Estes Industries, Customer Service Department, Penrose, Colorado 81240.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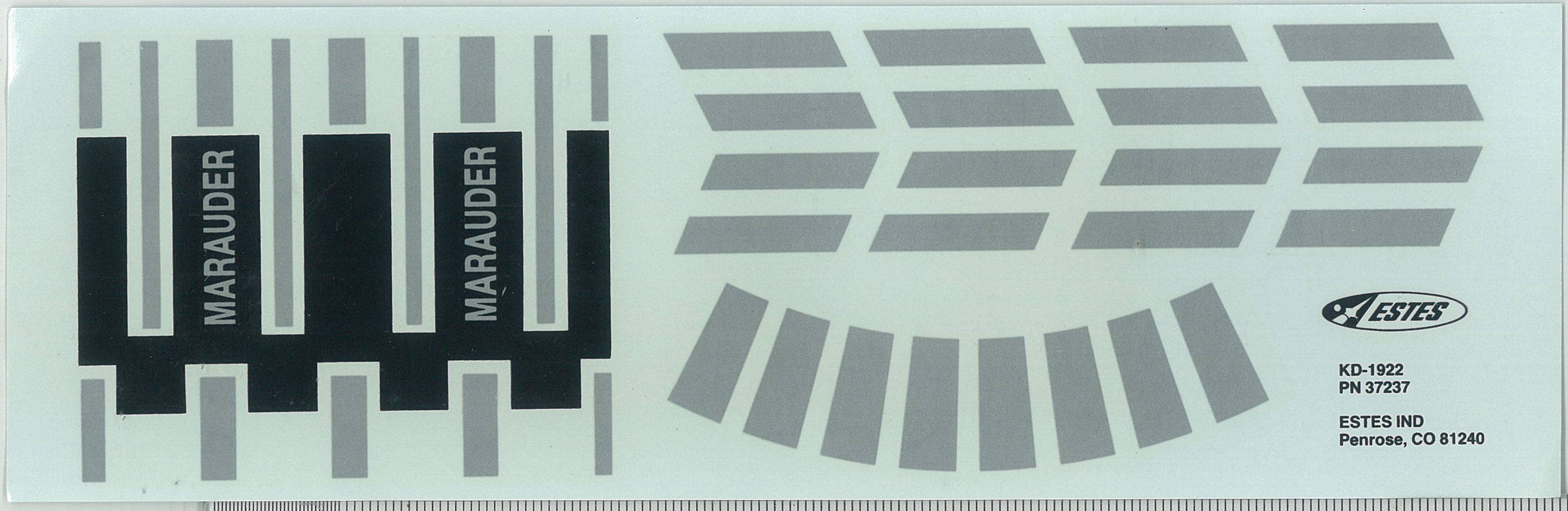
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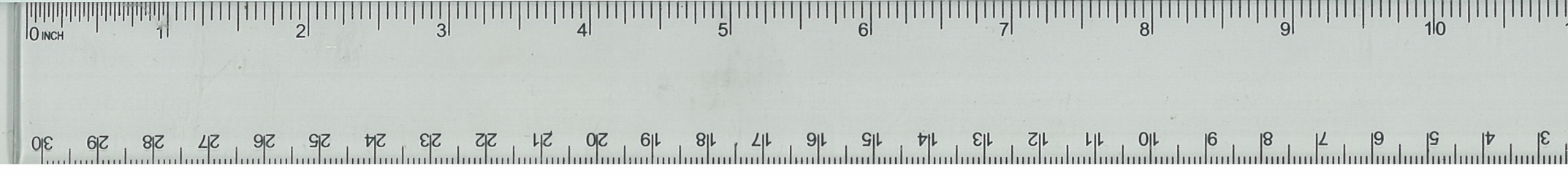
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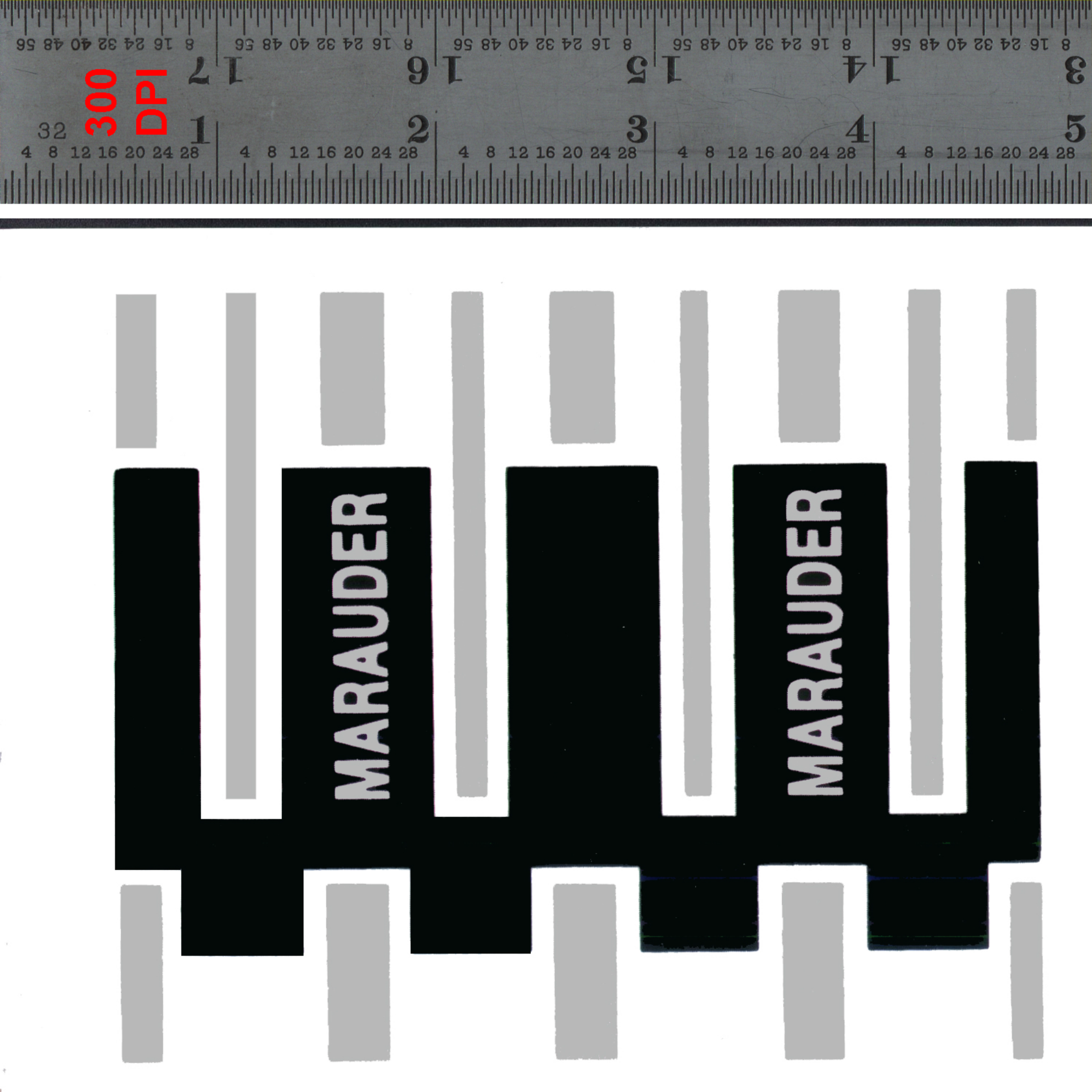
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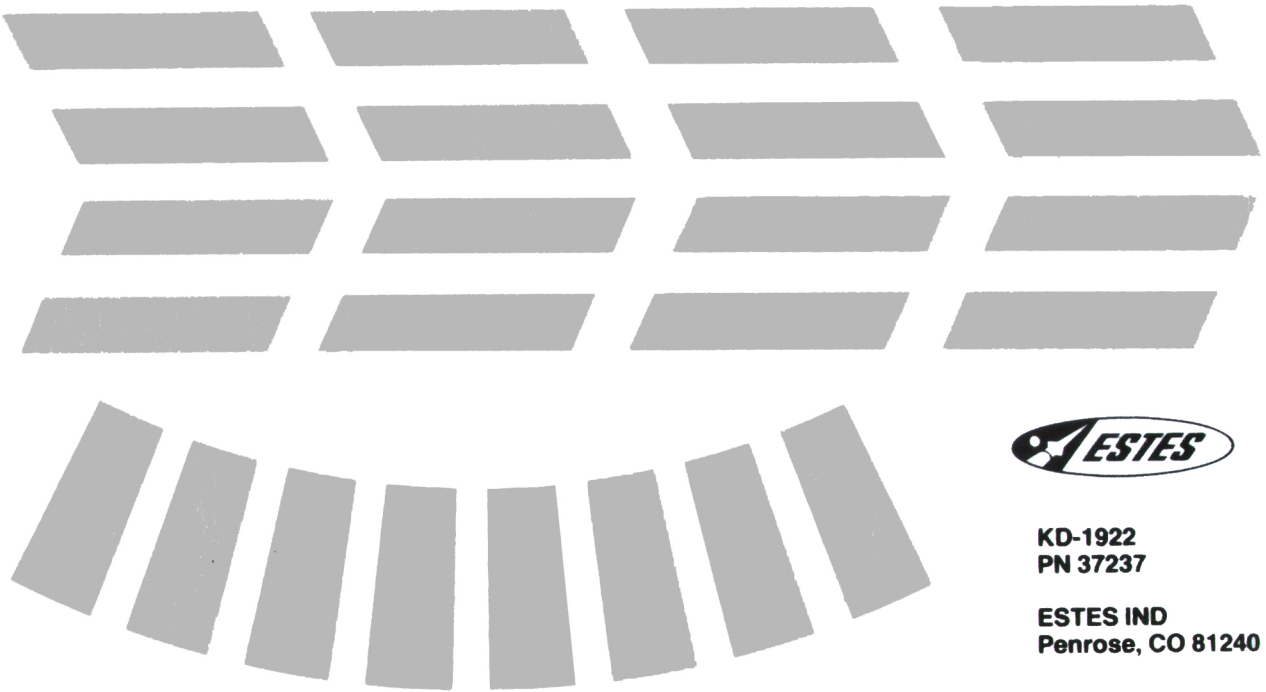

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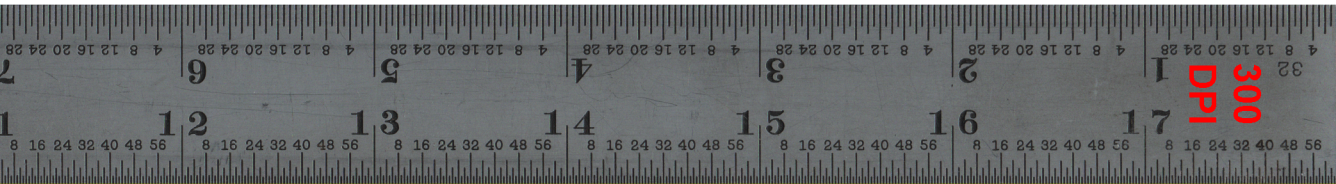

PARTS LIST KIT N0. 1922 - Marauder								
Quantity	Description	Type	Number	Details1	Details2	Details3	Details4	Comment
1	PAPER BODY TUBE	BT-20J	30326	2.75" long	0.710" ID	0.736" OD	0.013" wall	Glassine
1	ENGINE HOLDER	EH-2	35025	2.8" long	.100" wide	.025" thick		Reg. & D
2	PAPER ADAPTER	*TA-1327	30090	0.738" ID	1.29" OD	.05" thick		BT-20 to BT-56
1	PAPER BODY TUBE	BT-55KA	30387	10.625" long	1.283" ID	1.325" OD	0.021" wall	Glassine
1	Die-Cut Balsa Sheet	*BF-1907	32607	2" wide	12" long	3/32" thick	0.09375	Scan
1	LAUNCH LUG	LL-2A	38175	5/32" ID	1/8" rod	1.25" long		Mylar
1	Shock Cord	SC-1	85730	18" long	1/8" wide			Rubber
1	PLASTIC NOSE CONE	PNC-60NA	72057	4.75" long	1.627" dia.	.75" shoulder	With TA-5560 attached	Blow molded
1	PAPER BODY TUBE	BT-60J	30412	2.75" long	1.595" ID	1.637" OD	0.021" wall	
1	Parachute	PK-12	85564	12" hexagon	1.25 mil thic	LDPE plastic	Red/Wht	
1	Shroud Line	SLT-72	38237	72"	.020" diame	Twisted cotton		
1	Tape Disc Strip	TD-3F	38406	1/2" dia.	Paper	Self-Stick		Set of 6
1	Decal Sheet	KD-1922	37237	4" wide	12" long	Blk, Slvr	Waterslide	Scan
*BALSA FIN STOCK BFS-30(2x12)								
*This is not correct. The TA-1327 ring fits the old Centuri ST-13 tube, (Estes labeled BT-56). Correct part is RA-2055 below.								
1	PAPER ADAPTER SET	RA-2055	30125	0.738" ID	1.27" OD	.05" thick	Set of 2	One ring notched.

MARAUDER

FLYING MODEL ROCKET

SKILL LEVEL 1

1–Beginner 2–Intermediate 3–Craftsman
4–Advanced 5–Expert

- **Easy to Build**
- **12″ Parachute Recovery**
- **Plastic Nose Cone**
- **Die-Cut Balsa Fins**
- **Huge Two-Color Decal**

Length: 20.3 in. (51.7 cm)
Dia: 1.325 in. (34 mm)
Payload Dia.: 1.637 in. (41.6 mm)
Weight: 2.3 oz. (65 g)
Engine Types: B4-4 (First Flight), B6-4, C6-5

FLIGHTS OVER 600 FEET!

This is a hobby kit requiring assembly. Recommended for ages 10 to adult. Engines, launch system, glue and finishing supplies are not included. Adult supervision suggested for those under 12 years of age when flying model rockets.

THE HOBBY INDUSTRY OF AMERICA PROMOTES ACHIEVEMENT

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Recommended for Ages 10 to Adult
Adult Supervision Suggested for Those Under 12 Years of Age When Flying Model Rockets.
1 MODEL KIT Paint and Glue not included.
1 MODELE REDUIT Peinture et Colle non comprises
Flying Model Rocket
MARAUDER
FLYING MODEL ROCKET
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SKILL LEVEL 1
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Fly Estes Model Rockets
A Rewarding Hobby For Ages 10 to Adult
ESTES INDUSTRIES
This product is designed for use only with Estes model rocket engines.
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FLYING MODEL ROCKET

SKILL LEVEL 1

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