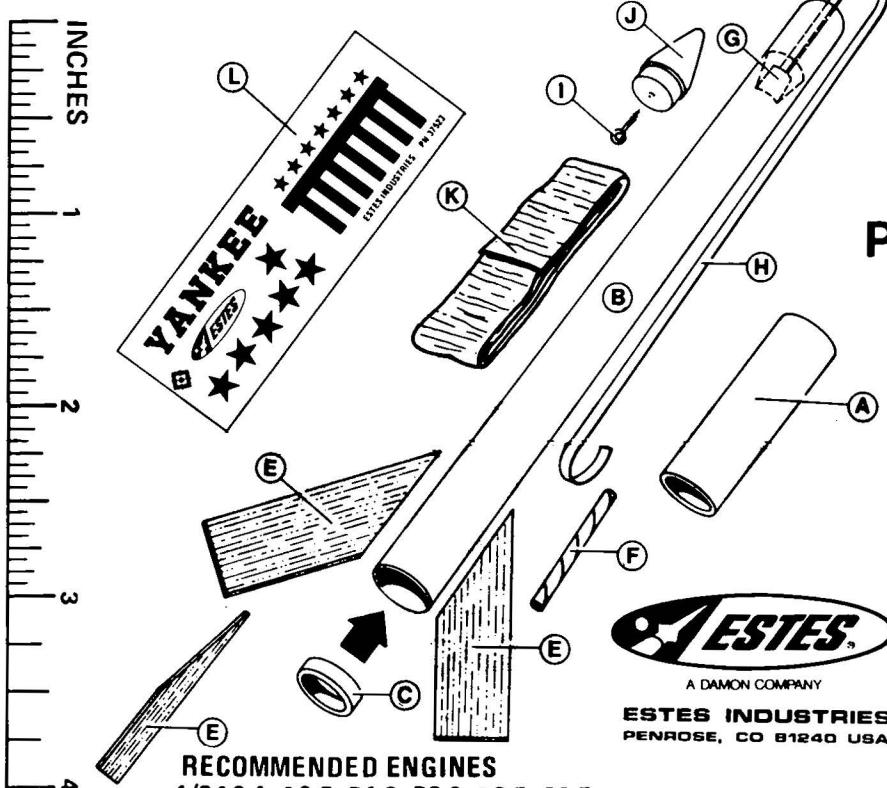




YANKEE

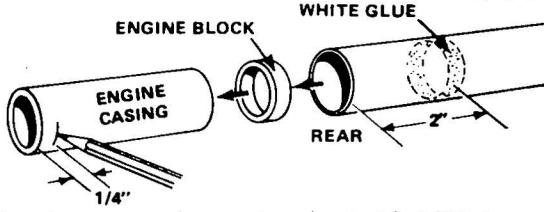
SKILL LEVEL 1 - Recommended for Intermediate Rocketeers.



RECOMMENDED ENGINES
1/2A6-4, A8-5, B4-6, B6-6, B8-7, C6-7

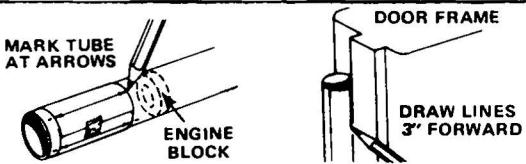
ASSEMBLY INSTRUCTIONS

1



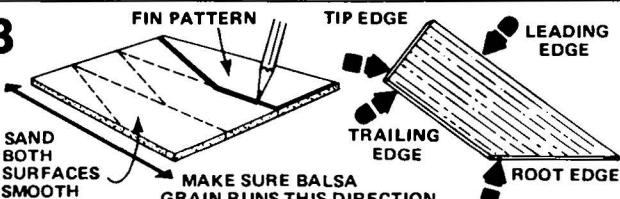
Mark the dummy engine casing (part A) 1/4" from one end. Spread a 1/2" wide band of glue around the inside of the body tube (part B) about 2" in from one end. Insert the engine block (part C) into this end. Push the engine block into place with the dummy engine casing until the mark on the casing is even with the end of the body tube. CAUTION: Once you have started to push the block forward, DO NOT STOP until it is in place, and then remove casing immediately!

2



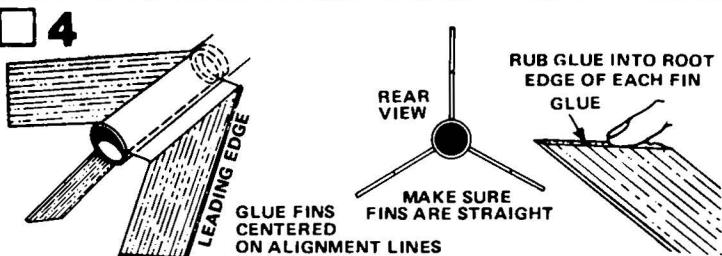
Cut out the tube marking guide from the pattern sheet (part D) and wrap it around the body tube. Make sure the guide is on the same end of the body tube as the engine block. Mark the body tube at each of the arrow points. Draw straight lines connecting each pair of marks. A door frame inside edge can be used as a guide as shown. Extend the lines about 3" forward from the rear of the body tube.

3



Cut out the fin pattern from the pattern sheet. Lay the pattern on the balsa fin stock (part E) with the grain of the wood and the grain shown on the pattern matched perfectly. Trace out 3 copies of the fin. Cut out the fins carefully with a modeling knife. Be especially careful to make straight, clean cuts. Sand the sides of the fins so they are flat and smooth. Round the leading and trailing edges of each fin with sandpaper. Sand the root edges and tip edges so they are flat and square with the sides of the fins.

4



Rub glue into the root edge of each fin and allow to dry. Apply glue to the fins again and position fins on the alignment lines in

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 a 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 respect.

PARTS LIST KIT NO. 1381

A 1	Dummy Engine Casing (Type EC-2)	35010
B 1	Body Tube (Type BT-20B)	30320
C 1	Engine Block (Type AR-520)	30162
D 1	Pattern Sheet (Back of Panel)	83410
E 1	Balsa Fin Stock	32391
F 1	Launch Lug (Type LL-2A)	38175
G 1	Shock Cord Mount (Type SCM-30)	84442
H 1	Shock Cord (Type SC-1B)	85734
I 1	Screw Eye (Type SE-2A)	38252
J 1	Nose Cone (Type BNC-20Y)	70241
K 1	Streamer (Type RS-20)	38278
L 1	Decal (Type KD-1381)	37523

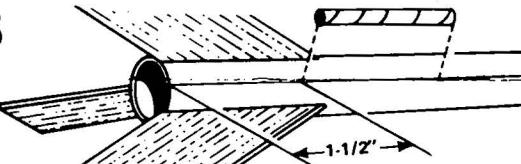
TOOLS AND MATERIALS

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, modeling knife with sharp blade, gloss blue and red enamel spray paints, and household white glue or resin glue (Elmer's, Titebond, or similar). Other types of glue are not recommended.

For easy and positive alignment of the fins on your model, we recommend the use of Estes' Fin Alignment Guide, Part No. 2231.

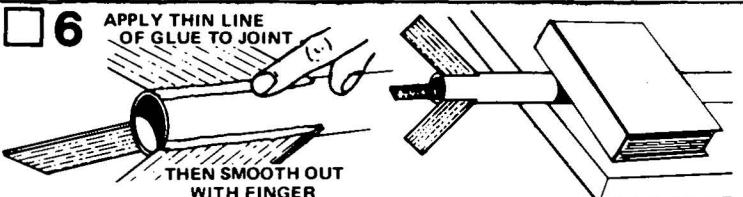
positions shown. Adjust the fins so they project straight away from the body tube. DO NOT set the rocket on its fins while the glue is wet.

5



Glue launch lug (part F) to rocket body tube on the launch lug line. The rear of the launch lug should be 1-1/2" from the rear of the rocket body tube. Align the launch lug straight along the body.

6



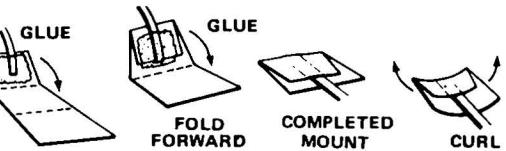
When the glue on the fin joints has dried, apply a glue reinforcement to each fin/body tube joint. Holding the model level, apply a line of glue to both sides of each fin joint and on both sides of the launch lug. Smooth out the glue with your finger. IMPORTANT – Support rocket on table edge as shown until the glue dries.

7

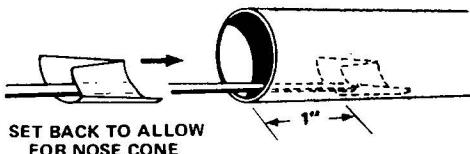


Proper application of sanding sealer makes the rocket look better and reduces drag so that the rocket will fly higher. However, this step is not essential to make a safe, attractive rocket. Apply a coat of sanding sealer to each fin. When sealer is dry, lightly sand all the sealed surfaces. Repeat sealing and sanding process until balsa grain is filled and smooth.

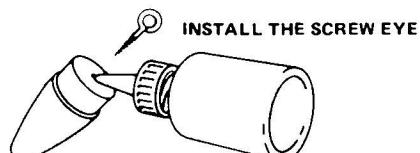
8



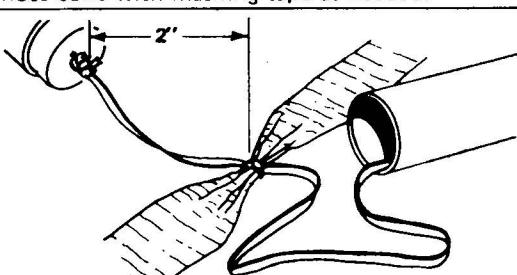
Cut out the shock cord mount (part G). Fold on dotted lines, then unfold and apply glue to Section 1. Lay the end of the shock cord (part H) into the glue. Fold over and apply glue to the back of Section 1 and the exposed portion of Section 2. Fold again to complete mount. Curl the edges of the mount up so it will match the contour of the body tube and hold with your fingers until the glue sets.

9

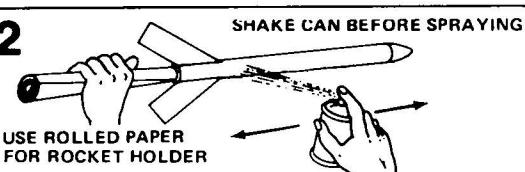
Use a finger or stick to apply glue to the inside of the front of the body tube, 1" to 2" from the front of the tube. Press the shock cord mount firmly into position in glue far enough from the front edge of the tube to allow clearance for the nose cone to fit into place. To insure a good bond use a stick or your finger to smear a film of glue over the mount and surrounding area in the body tube.

 10

Twist the screw eye (part I) into the base of the nose cone (part J), and remove it. Squirt a bit of glue into the hole and reinsert the screw eye. Wipe away excess glue. Make certain nose cone does not fit tightly in body tube. The nose cone should fit loosely enough to be easily removed from the body tube but not so loosely that the nose cone tends to fall out if the rocket is turned upside down and shaken with the nose cone in place. If fit is too tight, sand shoulder of nose cone to achieve proper fit. If fit is too loose, build up shoulder of nose cone with masking tape as needed.

 11

Using a double knot, tie the shock cord around the middle of the plastic streamer (part K) about 2" from the end of the shock cord. Attach the free end of the shock cord to the nose cone with a firm knot.

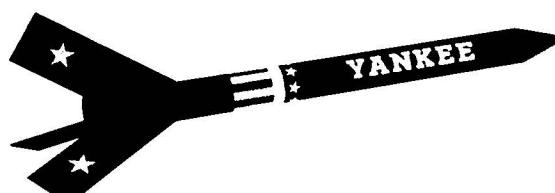
 12

After the sanding sealer is completely dry, paint the lower half of the model red. Let this coat dry overnight. Follow instructions on spray can for best results. We recommend spray enamel. Spray the model with several light coats of paint to avoid "runs".

 13

After the red paint has dried overnight, the blue color may be applied. Wrap a piece of masking tape around the body with the top edge of the tape 3-3/4" from the rear of the body tube. Wrap paper around the lower portion of the body and tape in place. Use pieces of tape to seal any openings in the paper "shroud". Paint the upper portion of the body blue. Allow the paint to dry for several hours before removing the paper and masking tape.

PAINTING AND DETAILING

 14

When all paint is dry, apply the decals (part L) 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. Apply the roll pattern decal first. The bottom edge of the decal should be positioned at the top of the launch lug. The solid white upper portion of the decal will cover the paint separation line. Next apply the name to the side opposite the launch lug. Finally, apply the large stars to both sides of each fin.

LAUNCHING COMPONENTS

To launch your rocket you will need the following items:

An Estes model rocket launching system

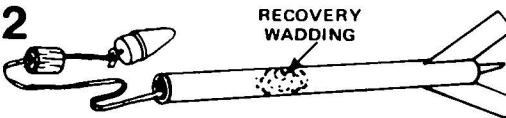
Flameproof recovery wadding (Estes Cat. No. 2274)

Estes 1/2A6-4, A8-5, B4-6, B6-6, B8-7 or C6-7 model rocket engines. Use an A8-5 engine for your first flight.

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

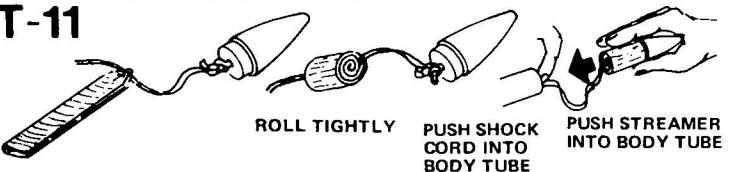
COUNTDOWN CHECKLIST

T-12



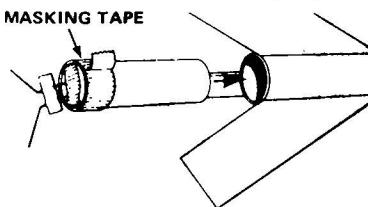
Pack 2 or 3 squares of loosely crumpled recovery wadding into the body tube. Usually this will fill the body tube for a distance equal to about 1-1/2 times its diameter.

T-11



Fold the streamer and roll tightly. Pack the shock cord and streamer into the body and socket nose cone in place. NOTE: If the streamer fits too tightly into the body, remove and re-roll. A too-tight fit could cause an ejection malfunction during flight.

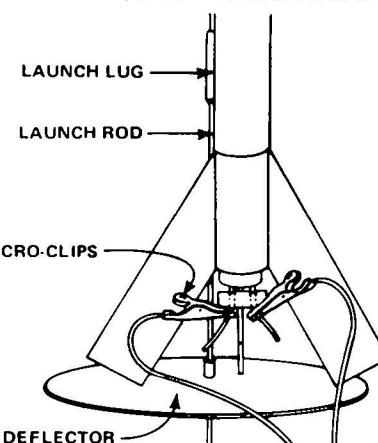
T-10



Wrap the rear of the engine with enough masking tape so that it makes a tight fit in the body tube. This fit must be tight to obtain proper streamer deployment. Insert the engine into the rocket so the rear of the engine projects 1/4" from the rear of the body tube.

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.

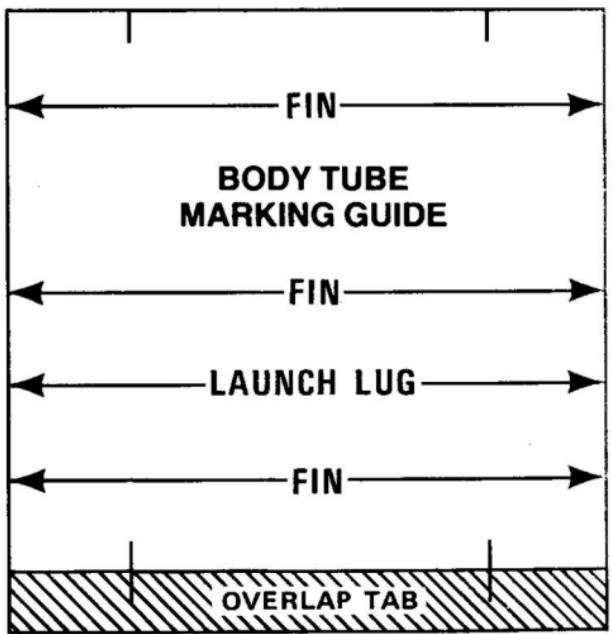
MISFIRE PROCEDURE

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.

ESTES INDUSTRIES

SP BT-20

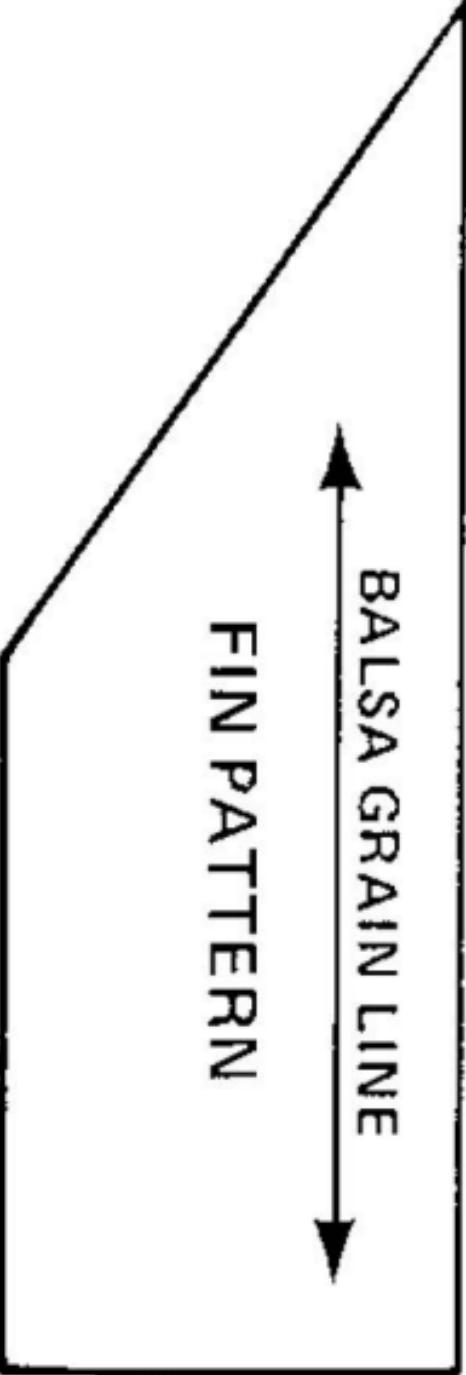


SHOCK
CORD
MOUNT

SEC. 3

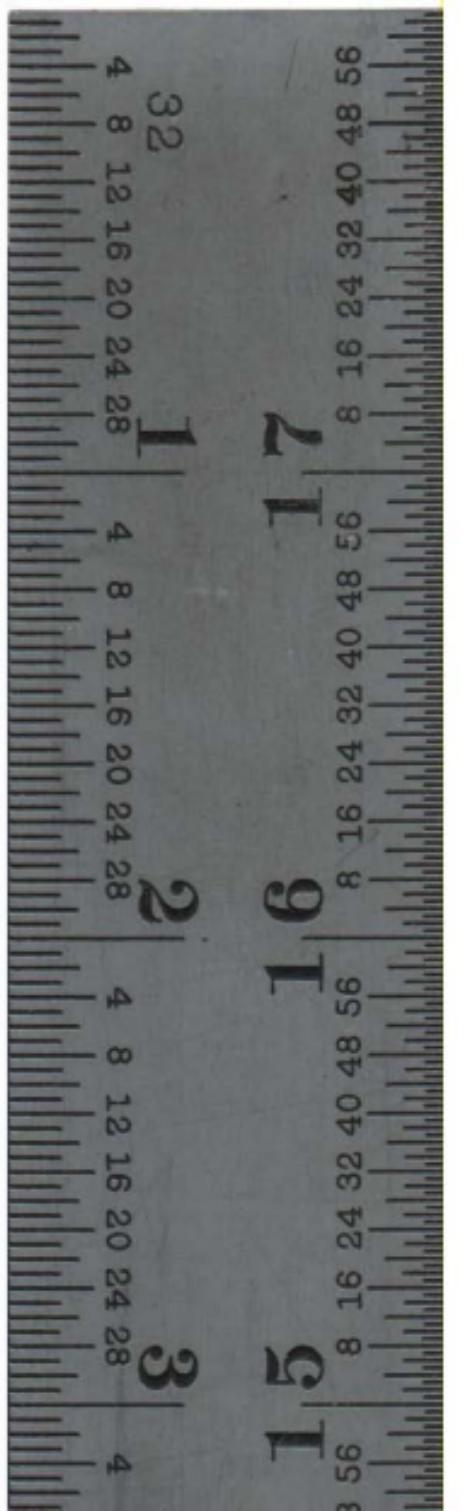
SEC. 2

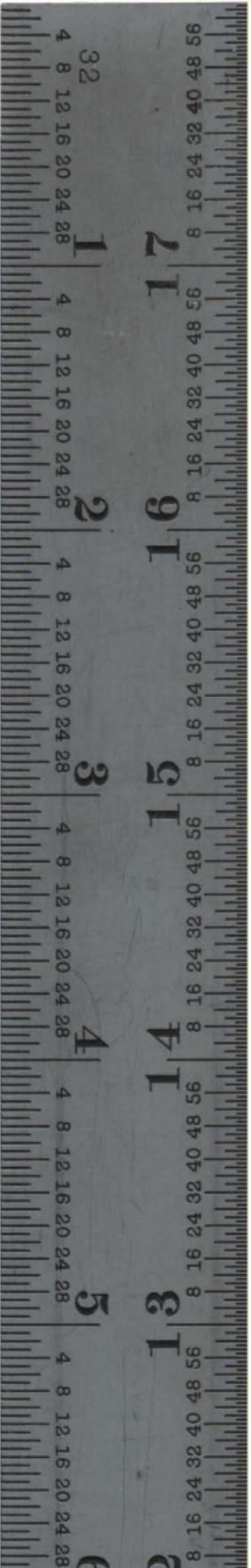
SEC. 1



BALSA GRAIN LINE

The diagram shows a rectangular frame containing a diagonal line from the bottom-left corner to the top-right corner. A horizontal double-headed arrow is positioned below the line, with the text "BALSA GRAIN LINE" written vertically along its center.





YANKEE



PARTS LIST KIT NO. 1881 - Yankee								
Quantity	Description	Type	Number	Details1	Details2	Details3	Details4	Comment
1	Dummy Engine Casing - Regular	EC-2	35010	.690" OD	2.75" long			
1	PAPER BODY TUBE	BT-20B	30320	8.65" long	0.710" ID	0.736" OD	0.013" wall	
1	CENTERING RINGS	AR-520	30162	.69" OD	.542" ID	0.25" long	BT-5 in BT-20	
1	PATTERN SHEET	SP-1381	83410/83242					Scan
1	BALSA FIN STOCK	BFS-20A	32391	1/16" thick	3" wide	3" long	0.0625	
1	LAUNCH LUG	LL-2A	2321/38175	5/32" ID	1/8" rod	1-1/4" long		
1	Shock Cord Mount	SCM-30	84442/900510					Scan
1	Shock Cord	SC-1B	85734	1/8" wide	12" long			Rubber
1	Screw Eye (Small)	SE-2A	38252	3/4" long				
1	BALSA NOSE CONE	BNC-20Y	70241	1.1" long	.736" dia.	.5" shoulder	Conical	
1	PAPER STREAMER	RS-20	38278	1" wide	20" long	Crepe Paper	Red	Flame Resistant
1	Decal	KD-1381	37523	2" wide	6" long	White	Waterslide	

YANKEE

FLYING MODEL ROCKET

SKILL LEVEL 1

• Requires 10 minutes to assemble
• Beginner • Expert

- Easy-to-Assemble
- High Performance Design
- Flights Over 2,000 Feet
- Patriotic Kit Decal
- Streamer Recovery

YANKEE

Length:
11" (27.9cm)

Diameter:
2.38" (6.0cm)

Weight:
4.2 oz. (120g)

Rocket Types:
100A-2, 100B-4, A8-2,
A8-3 (First Flight),
B6-4, C6-6, D6-4, E6-6,
H6-6, H6-7, K6-6, O6-7

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

ESTES

1381

ESTES PRODUCTS
MANUFACTURED AND SHIPPED FROM



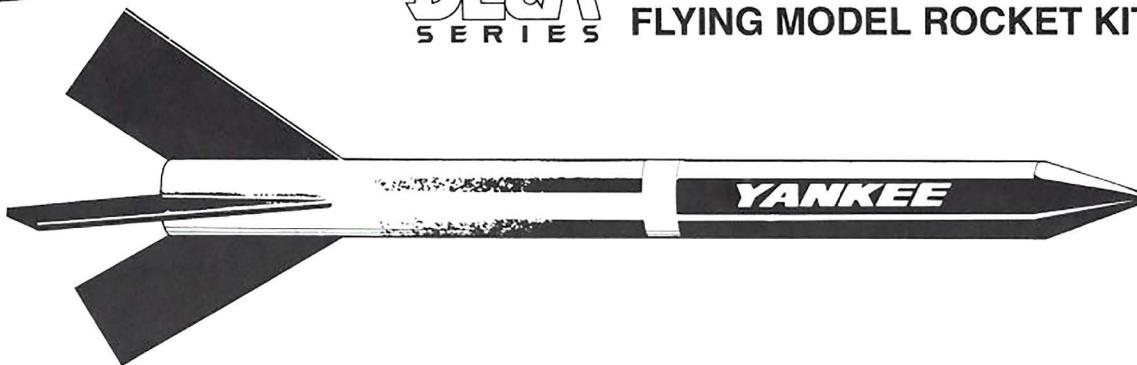




ESTES INDUSTRIES
1295 H STREET
PENROSE, CO 81240 USA

BET^A
SERIES

YankeeTM
FLYING MODEL ROCKET KIT EST 1381
(8-94) 83409

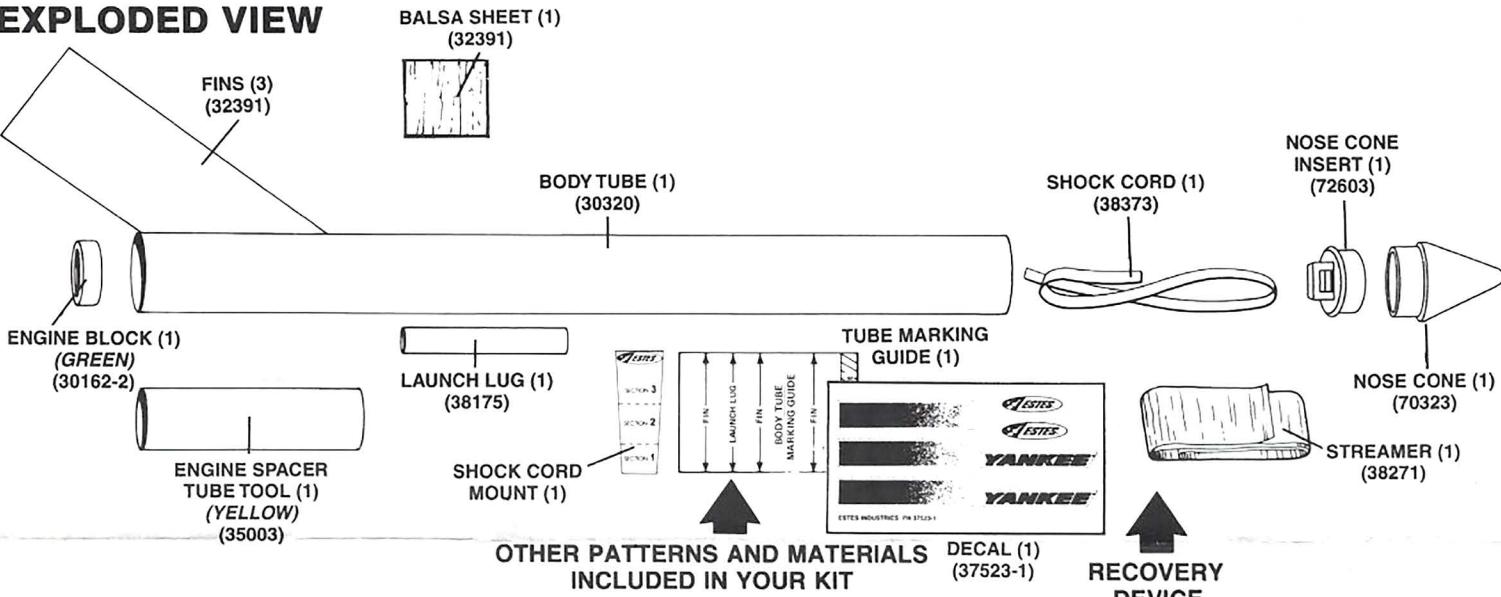


HOW TO USE THESE INSTRUCTIONS:

READ ALL INSTRUCTIONS BEFORE STARTING WORK ON THIS MODEL

- A. This rocket, incorporating basic model rocketry construction techniques, will help you in the development of your rocketry modeling skills.
- B. Read each step first and visualize the procedure thoroughly in your mind before starting construction.
- C. Lay parts out on the table in front of you. (Check inside tubes for any small parts.)
- D. Use exploded view to match all parts contained in kit.
- E. Collect all construction supplies that are not included in the kit.
- F. Tube marking guide, shock cord mount and fin pattern are printed in the instructions and will be found on page 7 in the patterns section.
- G. Test fit parts before applying any glue.
- H. Sand parts as necessary for proper fit.
- I. The construction supplies required for each step are listed at the beginning of each step.
- J. Check off each step as you complete it.

EXPLODED VIEW



EXTREMELY IMPORTANT: THE EXPLODED VIEW IS FOR REFERENCE ONLY! DO NOT USE THIS DRAWING ALONE TO ASSEMBLE THIS MODEL.

The exploded view is only intended to assist you in locating the parts included in this kit. Refer back to this exploded view as you build your model step by step. This method will help you to put the parts into perspective as you progress through the construction.

CONSTRUCTION SUPPLIES

In addition to the parts included in your kit, you will need these construction supplies. Each step shows which supplies will be required.



SANDPAPER
(#400 & #600 grit)



WOOD GLUE
(white or yellow)



SCISSORS



PENCIL



HOBBY KNIFE



MASKING TAPE



RULER



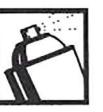
PAINT BRUSH



TUBE-TYPE PLASTIC CEMENT



SANDING SEALER



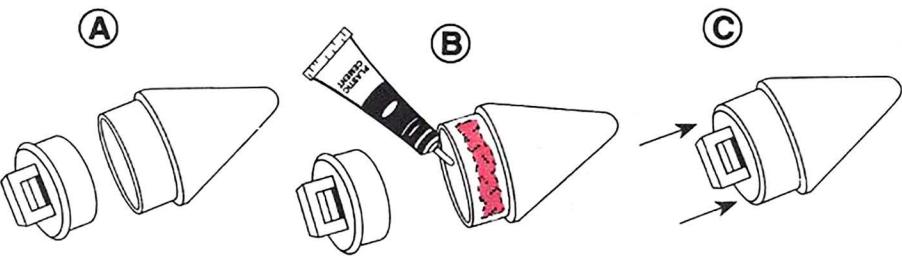
SPRAY PAINT
(primer optional)

GLUE IS APPLIED TO SURFACES SHOWN IN RED.

1. NOSE CONE ASSEMBLY



- A. Locate the nose cone and nose cone insert.
- B. Run a line of plastic cement inside base of nose cone.
- C. Insert nose cone insert into nose cone. Let dry.

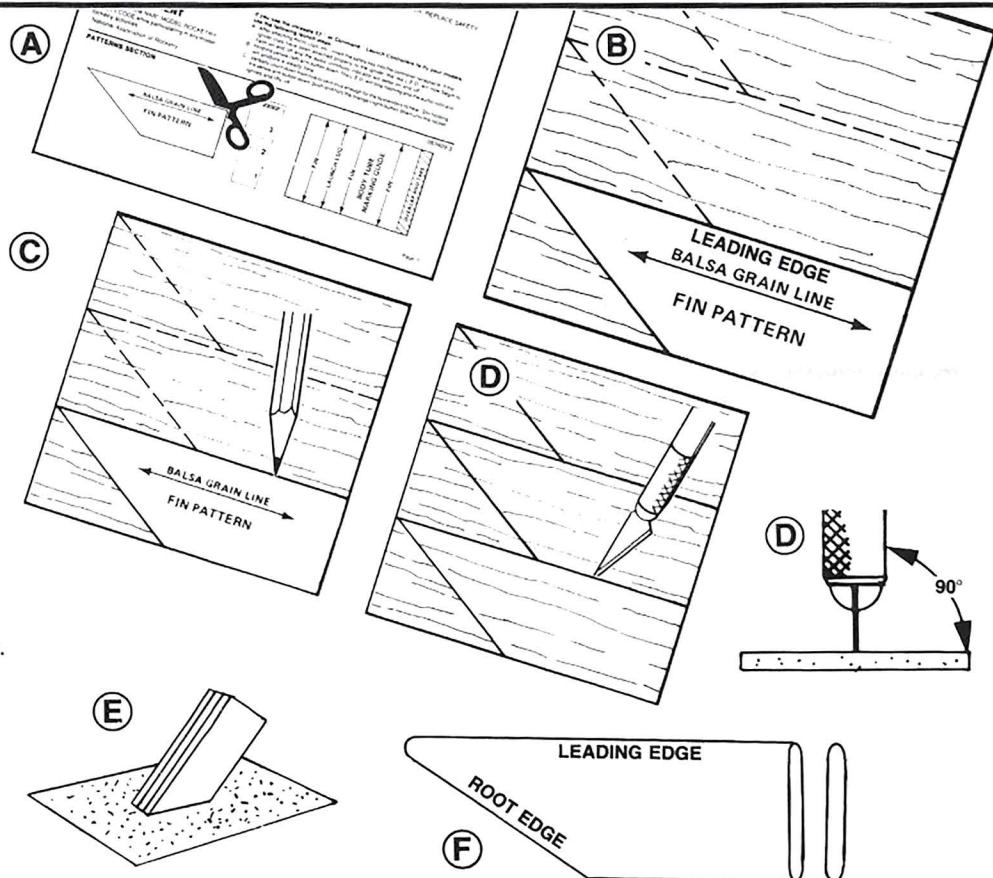


2. FIN PREPARATION

Identify the root edge that will be glued to the body tube and the front (leading) edge. The leading edge always parallels the grain of the wood for extra strength.



- A. Cut the fin pattern from the pattern section sheet on page 7.
- B. Lay the pattern on the balsa fin sheet as shown. **Important: Balsa grain must match grain line on pattern.**
- C. Draw around pattern to transfer three fin outlines onto the balsa.
- D. Cut the fins from the sheet. Hold knife vertically at 90° to work surface for even cut.
- E. Stack fins together and sand all edges.
- F. Optional: For a better-looking, higher-performing rocket, round the edges of the leading and trailing edge of the fin. See illustration.

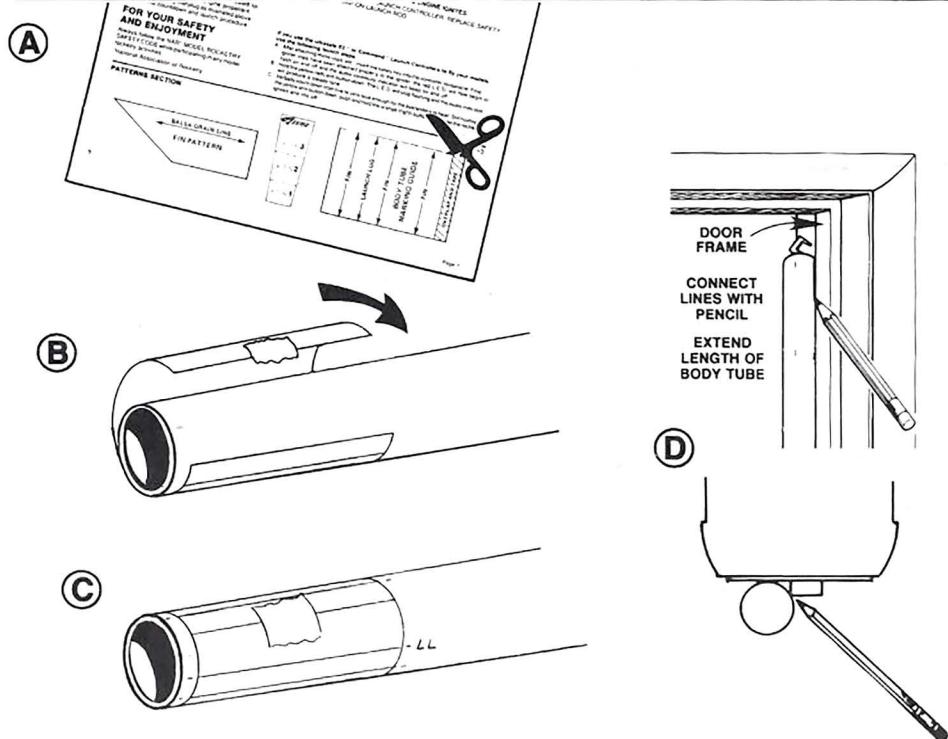


3. TUBE MARKING DETAIL

HINT: Fins are easier to attach if the body tube is lightly sanded with #600 grit sandpaper. Sand before marking the body tube.



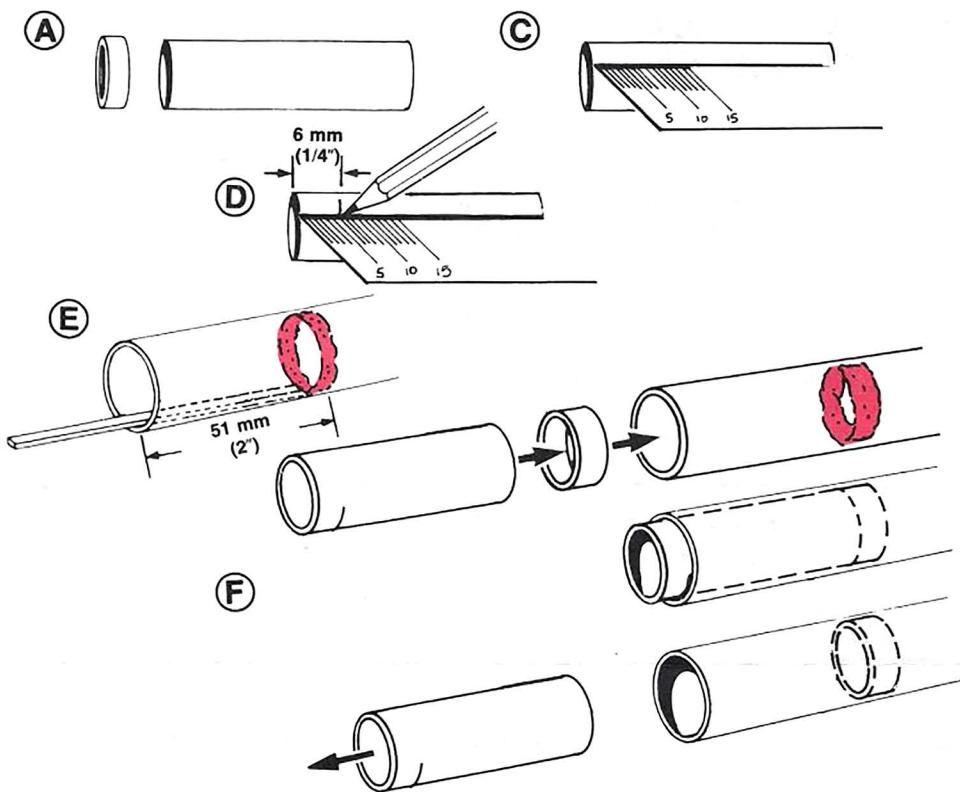
- A. Locate the tube marking guide on the patterns section on page 7. Cut the guide along the outline.
- B. Wrap the guide around the body tube and tape it in place.
- C. Mark tube at all arrow locations. One line on your tube marking guide is labeled LL, this means launch lug. Write LL on the body tube for that line. Remove marking guide.
- D. Using a door frame as a guide, draw straight lines connecting each pair of fin marks. Extend the launch lug line (LL) by 100 mm (4").



4. ENGINE MOUNT ASSEMBLY



- A. You will need the yellow engine spacer tube and green engine block.
- B. Locate the ruler printed in the center crease of this instruction sheet.
- C. Lay one end of the engine spacer tube on the zero mark of the ruler.
- D. Take your pencil and place a mark on the engine spacer tube at 6 mm (1/4") from zero.
- E. Using a balsa scrap stick or end of a pencil, apply a ring of glue inside the body tube about 51 mm (2") from the end.
NOTE: This must be the same end of the tube on which fin lines were drawn.
- F. Push the green engine block into the body tube using the spacer tube. Push until the 6 mm (1/4") mark on the spacer tube is even with the end of the body tube. **Remove spacer tube immediately.**



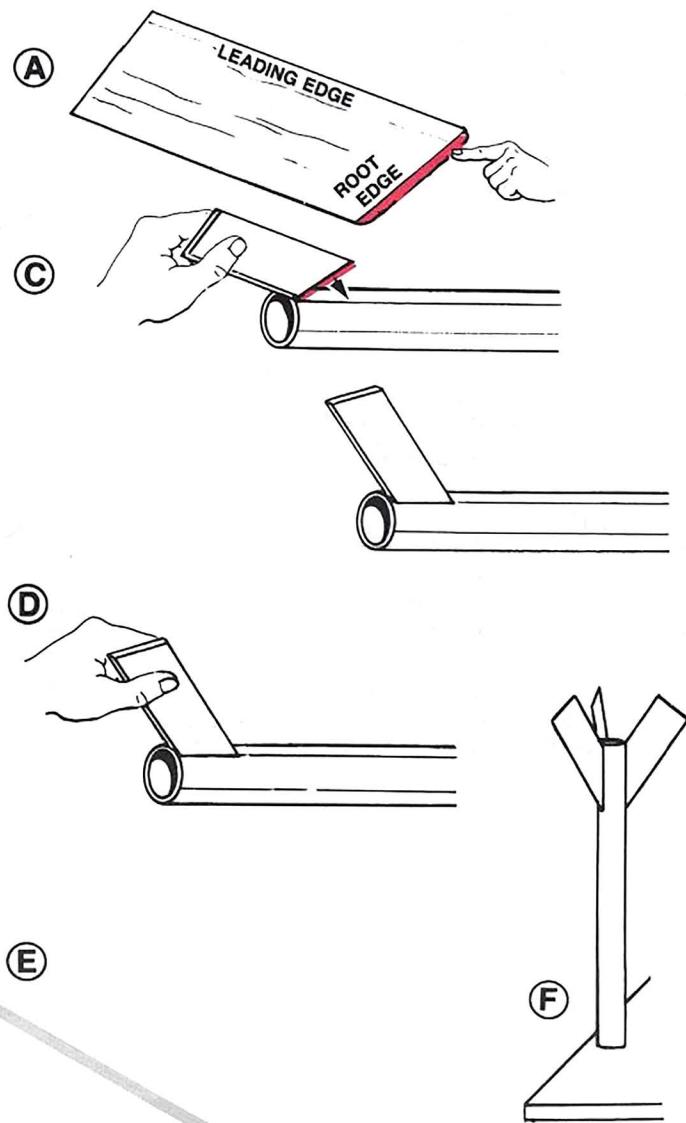
5. FIN ATTACHMENT

NOTE: Before gluing your fins, match the fin shape to the fin pattern shown in this step. Identify the root edge that will be glued to the body tube and the front (leading) edge. The leading edge always parallels the grain of the wood for extra fin strength. This will help you attach your fins correctly. **Remember: Fins must be attached correctly for stable flights.**



- A. Rub a thin film of glue into the root edge of one fin. Allow it to dry for a minute or two. This will make it easier to attach the fin and will create a stronger bond.
- B. Apply another thin film of glue to the root edge of the same fin.
- C. Set the rear edge of the fin at the end of the body tube and gently press the root edge along the body tube fin line.
- D. Carefully adjust the fin, if needed, so it will project straight up from the body. Work slowly and carefully so as not to disturb the glue joint. Attach remaining fins in same manner. Do not set rocket on fins while glue is wet.
- E. After all fins are attached, use shaded end view to check proper fin spacing.
- F. Important: Stand rocket on table as shown. Allow fins to dry before proceeding.

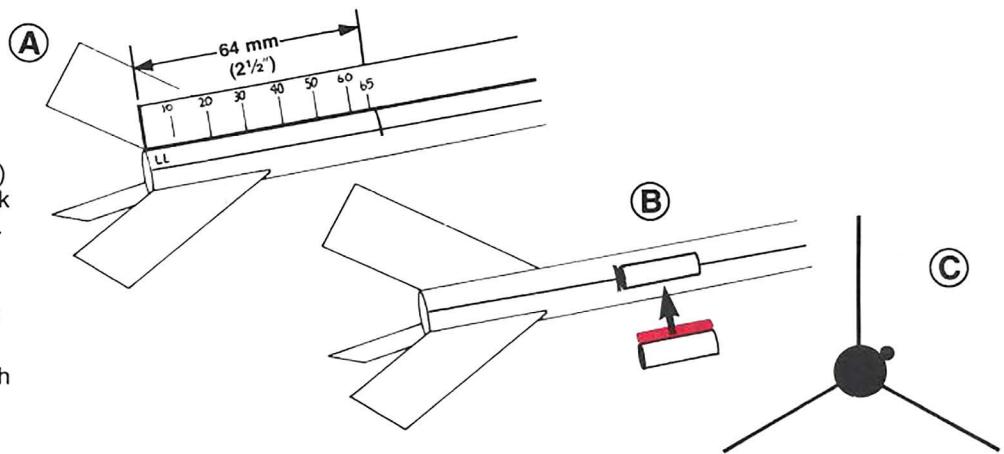
At this point, it is a good idea to rest for a few minutes. Get up and stretch or read through the next steps before doing any more work.



6. LAUNCH LUG ATTACHMENT



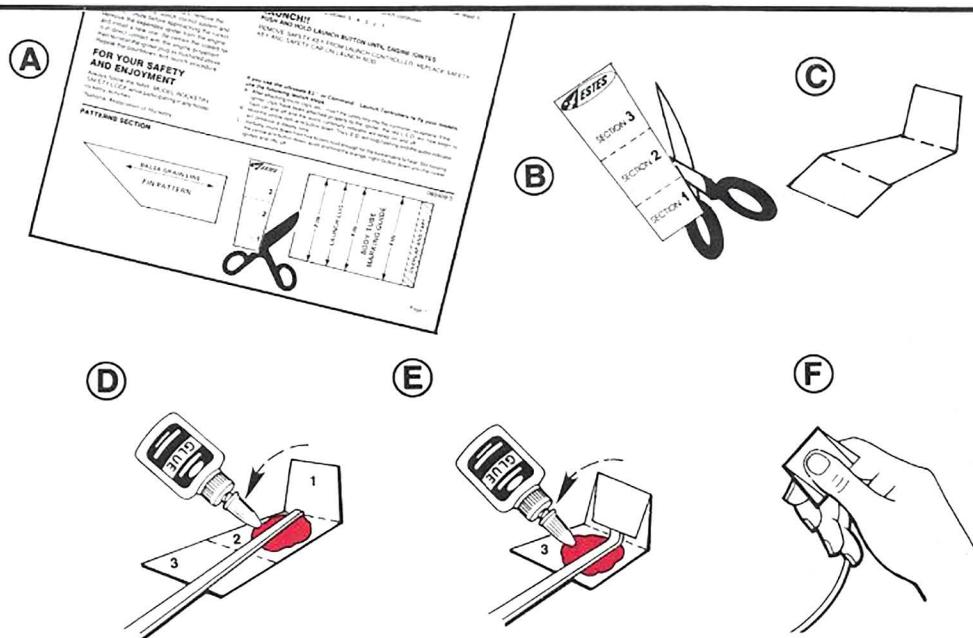
- A. Measure approximately 64 mm (2½") from rear of body tube and place a mark on the launch lug (LL) reference line. Use this mark as a starting point to attach the launch lug.
- B. Apply glue to the launch lug and attach it to the body tube.
- C. Make sure the launch lug is aligned with the body tube as shown on the end view. Allow to dry.



7. SHOCK CORD MOUNT ASSEMBLY



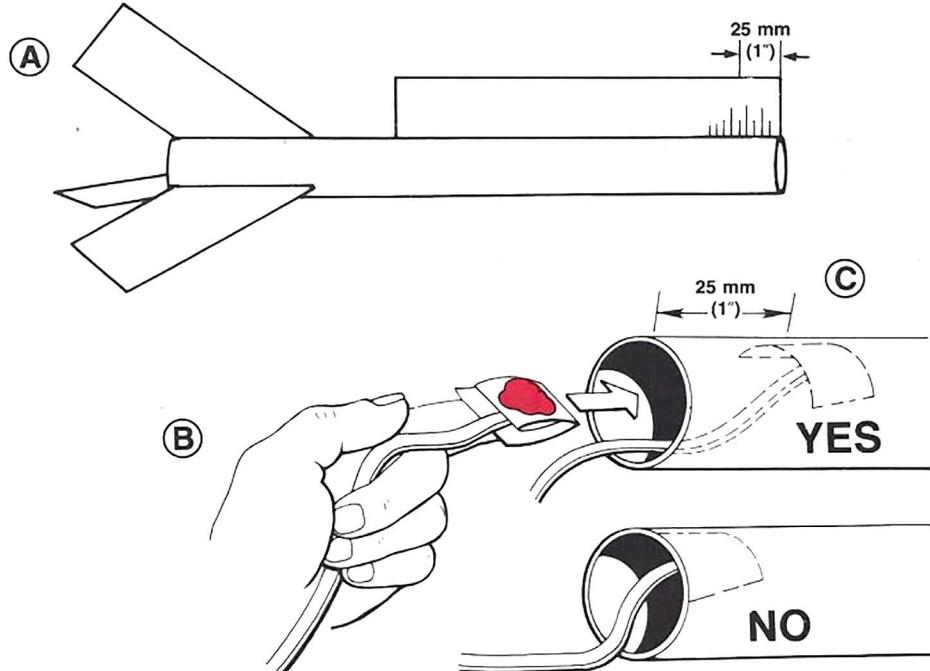
- A. Locate the shock cord mount in the patterns section.
- B. Cut out the shock cord mount along the solid black outline.
- C. Crease on dotted lines by folding.
- D. Spread glue on section 2 and lay end of shock cord into glue at a slight diagonal as shown.
- E. Fold section 1 forward. Apply glue to section 3. Fold forward again.
- F. Clamp firmly with your fingers for two minutes until glue dries.



8. SHOCK CORD MOUNT ATTACHMENT



- A. Measure approximately 25 mm (1") from the front end of the body tube.
- B. Apply glue to shock cord mount and insert into tube.
- C. Set the mount back at least 25 mm (1") to allow for nose cone clearance and press mount firmly into glue as shown.
- D. Hold until glue sets.

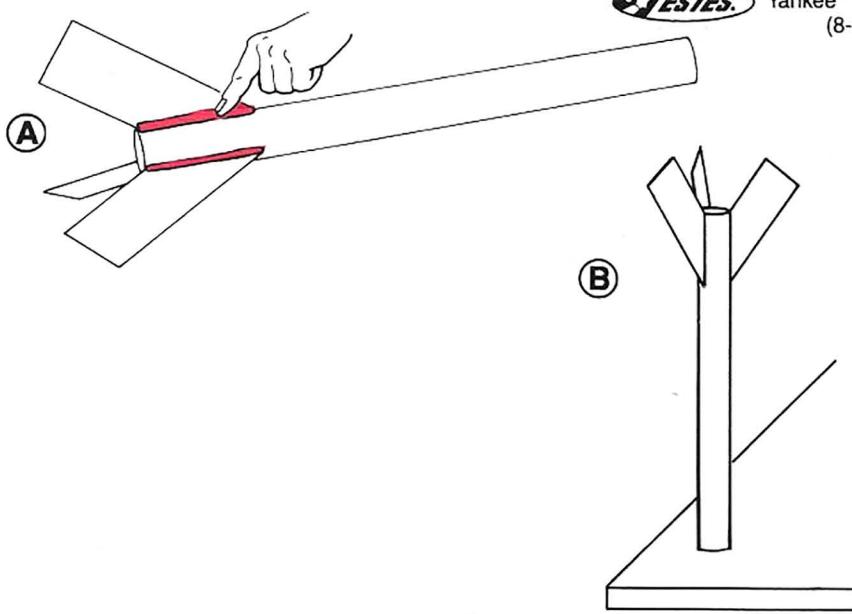


9. GLUE REINFORCEMENT DETAIL

NOTE: Glue joint reinforcements or fillets are important because they help blend the fins, launch lugs or other components into the body tube. This blending improves the looks of your model, allows smoother air flow over your rocket during flight and strengthens the attachment points.



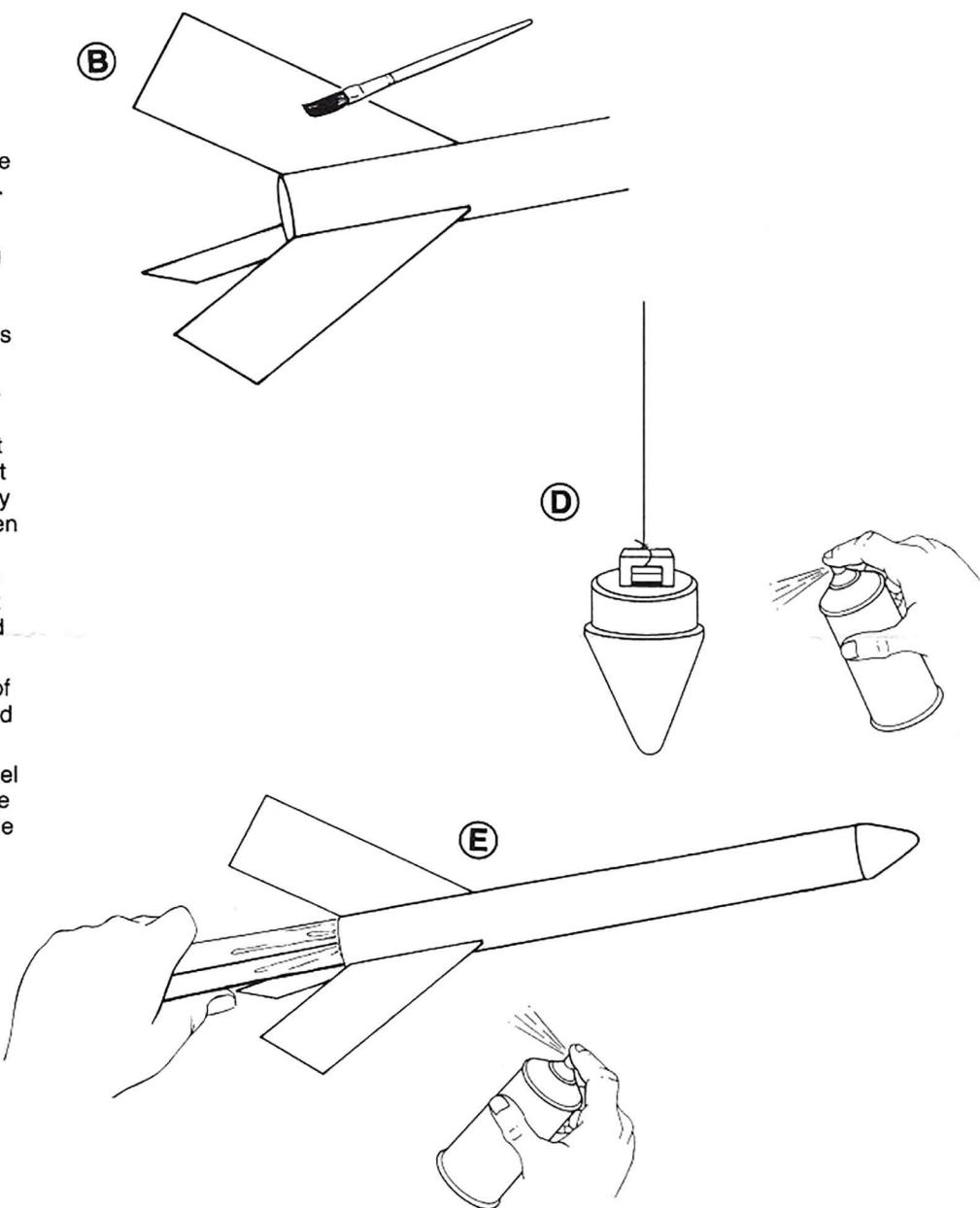
- A. Reinforce each fin/body tube joint with glue and each side of launch lug as shown. Use your finger to help smooth the glue (fillet).
- B. Stand rocket on table as shown to allow glue to dry for approximately five minutes. Wipe away any excess glue that may run down the side of the body tube. Allow to dry.



10. FINISHING YOUR ROCKET



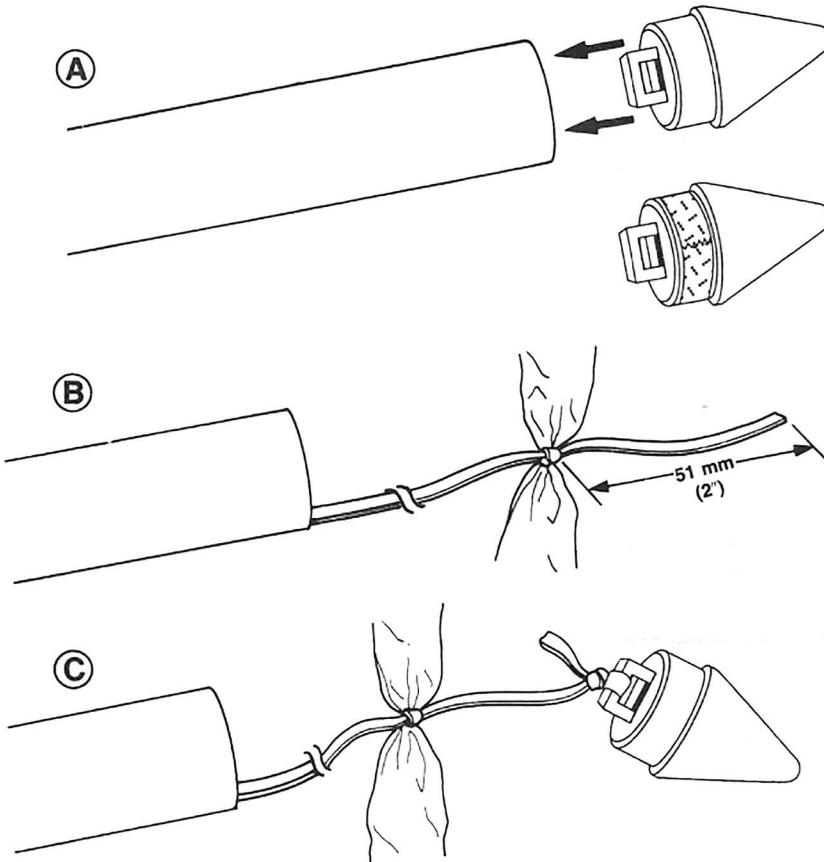
- A. Before you paint your rocket make sure all of the glue joints are completely dry.
- B. Optional: For increased performance and a smoother finish, apply sanding sealer to the fins before you paint. When the sealer is dry, sand again, then seal and sand again. Repeat this until the fins are smooth.
- C. Optional: For a smoother and better-looking finish, spray a coat of automotive primer on your rocket. Do not apply too much. Lightly sand the rocket with 400 to 600 grit sandpaper. Apply another coat if needed. Sand between coats. The primer will allow the final coats of paint to adhere better to the rocket. Several light mist coats of paint are preferable. Too much paint will add to the rocket's weight.
- D. Refer to the illustration on the front of the color panel for paint locations and decal placement.
- E. Use spray enamel to paint your model rocket. Make a handle by rolling a piece of paper. Insert it into the rocket while painting. Allow paint to dry.



11. RECOVERY DEVICE ATTACHMENT



- A. Check the fit of the nose cone in the body. Nose cone must slide easily into the tube but not be so loose that it wobbles when you shake the rocket. If it is too tight, lightly sand the shoulder of the nose cone. If too loose, wrap a bit of masking tape around the shoulder.
- B. Using a double knot, tie the free end of the shock cord around the middle of the streamer about 51 mm (2") from the end of the shock cord.
- C. Tie the end of shock cord to the nose cone eyelet.

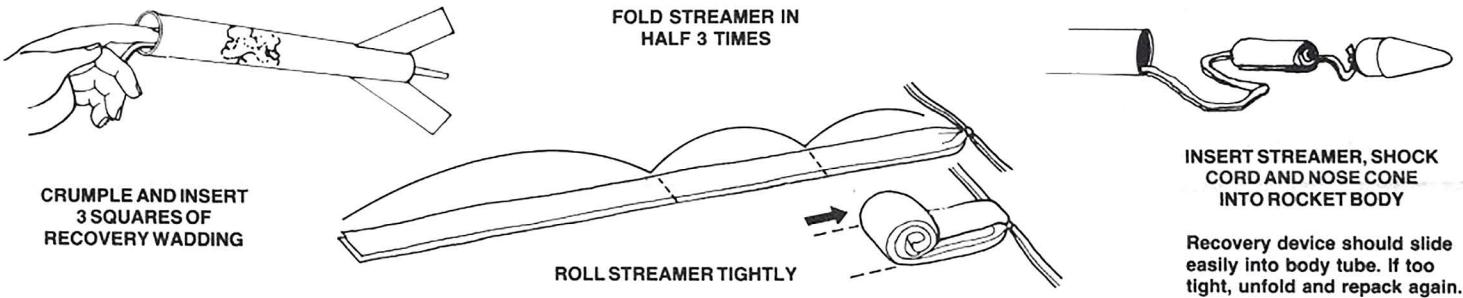


WHAT TO EXPECT WHEN FLYING YOUR YANKEE™ ROCKET

The Yankee™ model rocket, on a 1/2A6-2 or an A8-3 engine, can easily be flown off the area the size of a baseball field. The 1/2A6-2 or A8-3 should give you between 107 and 183 meters (350 to 600 feet) altitude. If you choose to use a high performing C6-7 (about 549 meters - 1800 feet altitude), then you need an area at least

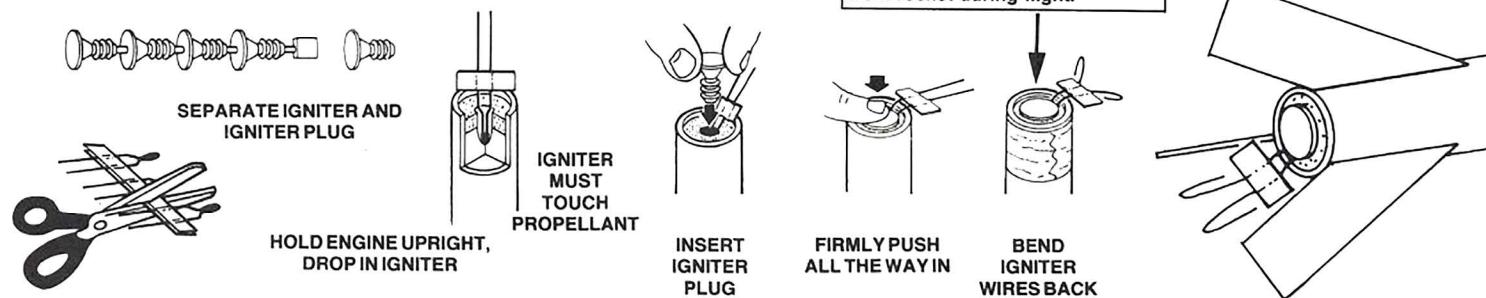
the size of a football field. The Yankee™ is recovered with a streamer. The streamer can be easily seen when it is ejected at apogee. The streamer also makes it easier to find your rocket once it is on the ground. Have fun flying your Yankee™!

ROCKET PREFLIGHT



PREPARE ENGINE

NOTE: Igniter plugs come with rocket engines. If your engines did not come with plugs, follow the instructions that came with the engines.



LAUNCH SUPPLIES

To launch your rocket you will need the following items:

- Estes Electrical Launch Controller and Launch Pad
- Estes Recovery Wadding No. 2274
- Recommended Estes Engines: 1/2A6-2, A8-3, A8-5 (First Flight), B4-4, B4-6, B6-4, B6-6, B8-5, C6-5 or C6-7

To become familiar with your rocket's flight pattern, use an A8-5 engine for your first flight. **Use only Estes products to launch this rocket.**

FLYING YOUR ROCKET

Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 76 meters (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 4° Celsius (40° Fahrenheit)].

Parachute may be dusted with talcum powder to avoid sticking.

MISFIRES

If the igniter functions properly but the propellant does not ignite, keep in mind the following: An Estes igniter will function properly even if the coated tip is chipped. However, if the coated tip is not in direct contact with the engine propellant, it will only heat and not ignite the engine.

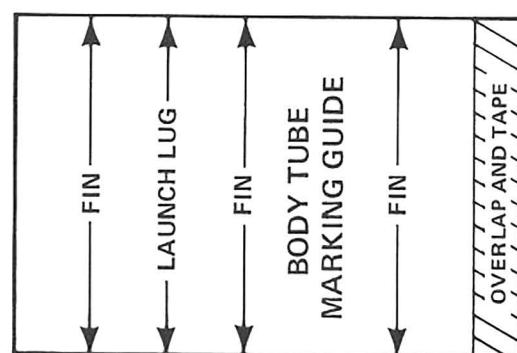
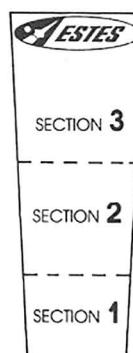
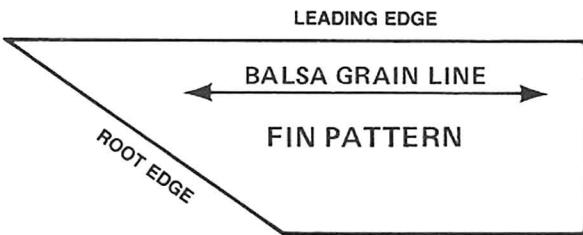
When an ignition failure occurs, remove the safety key from the launch control system and wait one minute before approaching the rocket. Remove the expended igniter from the engine and install a new one. Be certain the coated tip is in direct contact with the engine propellant, then reinstall the igniter plug as illustrated above. Repeat the countdown and launch procedure.

FOR YOUR SAFETY AND ENJOYMENT

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

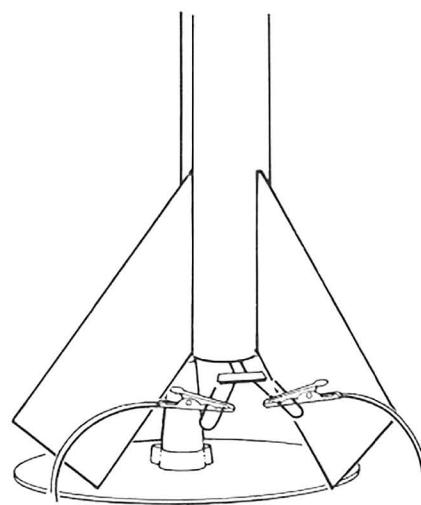
*National Association of Rocketry

PATTERNS SECTION



SAFETY KEY MUST NOT BE IN LAUNCH CONTROLLER WHEN ATTACHING MICRO-CLIPS TO ENGINE IGNITERS

MICRO-CLIPS MUST NOT TOUCH BLAST DEFLECTOR OR EACH OTHER



COUNTDOWN AND LAUNCH

- ⑩ BE CERTAIN SAFETY KEY IS NOT IN LAUNCH CONTROLLER.
- ⑨ Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- ⑧ 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.
- ⑦ Move back from your rocket as far as launch wire will permit (at least 5 meters - 15 feet).
- ⑥ INSERT SAFETY KEY to arm the launch controller.

Give audible countdown 5...4...3...2...1

LAUNCH!!

PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

REMOVE SAFETY KEY FROM LAUNCH CONTROLLER. REPLACE SAFETY KEY AND SAFETY CAP ON LAUNCH ROD.

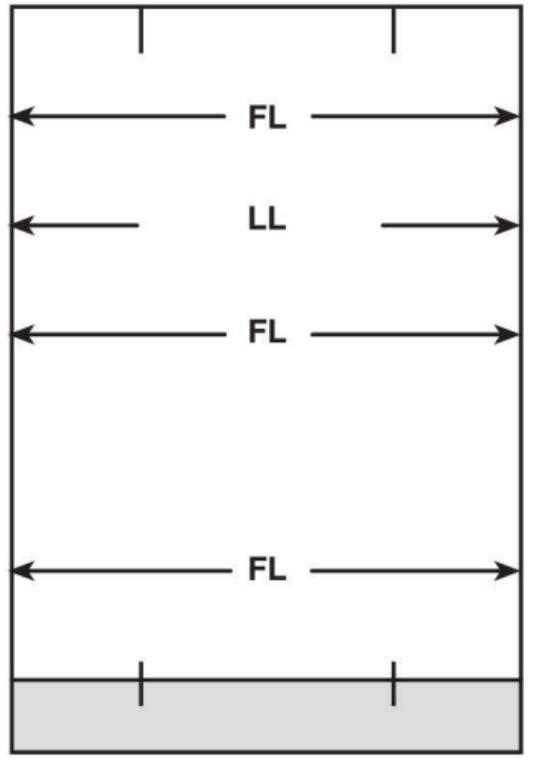
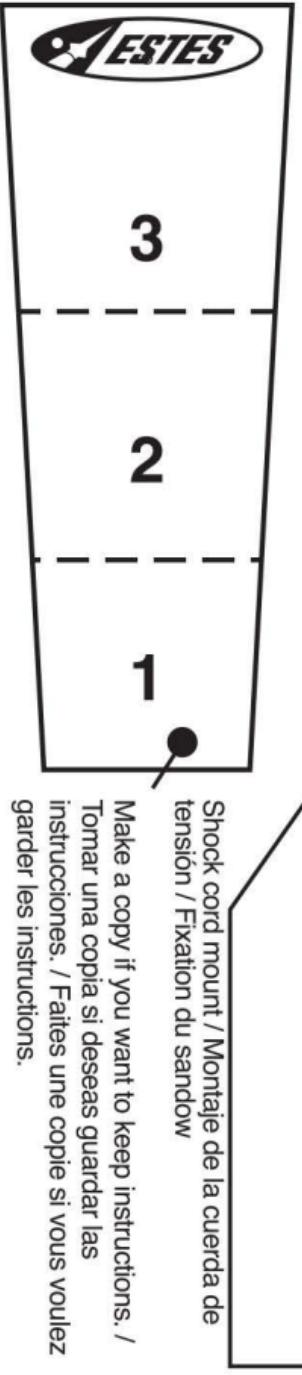
If you use the E2™ or Command™ Launch Controllers to fly your models, use the following launch steps.

- A. After attaching micro-clips, etc., insert the safety key into the controller receptacle. If the igniter clips have been attached properly to the igniter, the red L.E.D. will now begin to flash on and off and the audio continuity indicator will beep on and off.
- B. Hold the yellow (left) arm button down. The L.E.D. will stop flashing and the audio indicator will produce a steady tone.
- C. Verbally count down from five to zero loud enough for the bystanders to hear. Still holding the yellow arm button down, push and hold the orange (right) button down until the rocket ignites and lifts off.

FLIGHT DATA CARD

Flight number	Date	Engine type	Altitude predicted/actual	Flight duration predicted/actual	Recovery device operation	Performance comments	Condition after recovery
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PATTERN SECTION / SECCIÓN DE LOS PATRONES / SECTION DES PATRONS



Make a copy if you want to keep instructions. /
Tomar una copia si deseas guardar las
instrucciones. / Faites une copie si vous voulez
garder les instructions.

HS3063Na

10

11

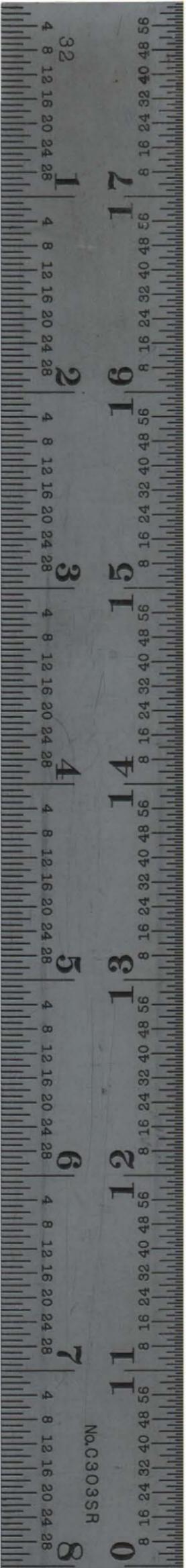
12

13

14

15

16

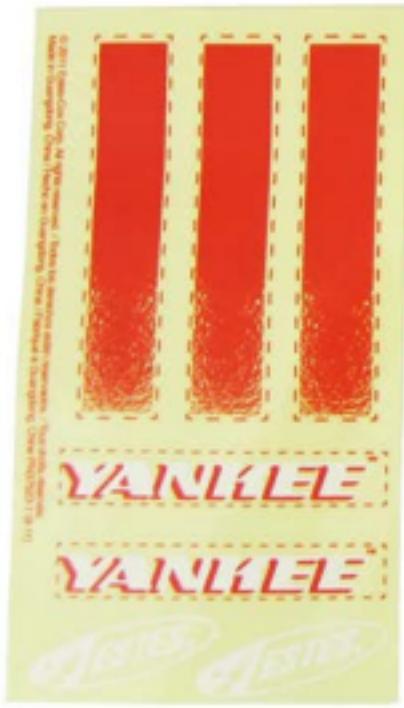


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YANKEE

YANKEE







BET^A SERIES

YANKEE™

Flying Model Rocket

SKILL LEVEL 1



Flies Up To
523 m (1700 ft)



High Altitude
Performance

Length: 379 mm (11 in.)

Diameter: 16.7 mm

(0.736 in.)

Weight: 12 g (0.42 oz)

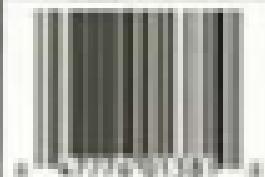
Recommended

Engines: 10D4-2, A8-3, A8-5
(first flight), B4-4, B4-6, B6-4,

B6-6, B6-8, C6-6, C6-7

Assembly Requires (not
including): Hobbyfoam, glue
(white or yellow), paint

EST 1381



ESTES MANUFACTURING
1000 S STREET
PENNSA, CO 81240
MADE IN CHINA

1381000

EST1381





Estes-Cox Corp.
1295 H Street, PO Box 227
Penrose, CO 81240-0227
Made in Guangdong, China
Hecho en Guangdong, China
Fabriqué en Guangdong, Chine

YANKEE™



1381

Skill Level
Nivel de habilidad
Niveau de dextérité

1


www.estesrockets.com

MODEL ROCKET INSTRUCTIONS / INSTRUCCIONES PARA EL MODELO DE COHETE / INSTRUCTIONS POUR LES FUSÉES MINIATURES

KEEP FOR FUTURE REFERENCE • GUÁRDALAS PARA FUTURA REFERENCIA • À CONSERVER POUR RÉFÉRENCE ULTÉRIEURE

IMPORTANT: Please record date found on decal and keep for future reference.

IMPORTANTE: Favor de escribir la fecha que aparece en la calcomanía y guardarla para futura referencia.

IMPORTANT: Prendre note de la date indiquée sur la décalcomanie et conserver pour toute référence ultérieure.

Read all instructions. Make sure you have all parts and supplies. Test fit all parts before applying glue. Sand as necessary for precision assembly. Product color and shape may vary. / **Leer todas las instrucciones.** Asegurarse de tener todas las partes y los materiales. Probar el ajuste de las piezas antes de poner el pegamento. Lijar lo que sea necesario para obtener un ensamblaje preciso. El color y la forma pueden variar. / **Lire toutes les instructions.** S'assurer de posséder toutes les pièces et accessoires. Vérifier si les pièces s'assemblent bien avant de mettre de la colle. Poncer autant que nécessaire pour assurer un assemblage précis. La couleur et la forme du produit peuvent varier.

SUPPLIES / MATERIALES / FOURNITURES



SCISSORS / TIJERAS / CISEAUX



PENCIL / LÁPIZ / CRAYON



RULER / REGLA / RÈGLE



FINE SANDPAPER / LIJA FINA / PAPIER ABRASIF FIN



CARPENTER'S GLUE / PEGAMENTO DE CARPINTERO / COLLE À BOIS



HOBBY KNIFE / NAVAJA DE PRECISIÓN / COUTEAU DE BRICOLAGE



MASKING TAPE / CINTA ADHESIVA PROTECTORA / RUBAN-CACHE



PLASTIC CEMENT / CEMENTO PLÁSTICO / COLLE À MATIÈRE PLASTIQUE



PRIMER (WHITE) / BASE DE PINTURA (BLANCA) / APPRÊT (BLANC)



PAINT (BLUE, WHITE) / PINTURA (AZUL, BLANCA) / PEINTURE (BLEU, BLANC)



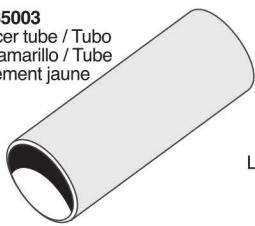
CLEAR TAPE / CINTA ADHESIVA TRANSPARENTE / RUBAN ADHÉSIF INCOLORE



CLEAR COAT (OPTIONAL) / CAPA DE PINTURA TRANSPARENTE (OPCIONAL) / COUCHE DE PEINTURE INCOLORE (OPTIONNEL)

030162

Green engine block / Bloqueador verde para el motor / Bloc-moteur vert



035003

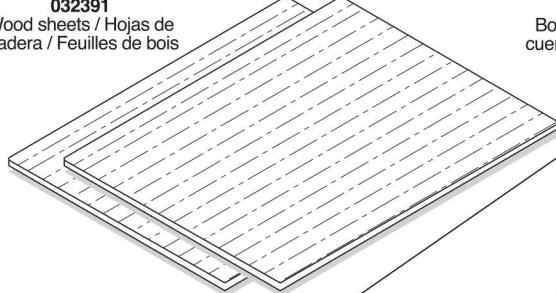
Yellow spacer tube / Tubo Separador amarillo / Tube d'espacement jaune

038175

Launch lug / Agarradera de lanzamiento / Cosse de lancement

032391

Wood sheets / Hojas de madera / Feuilles de bois

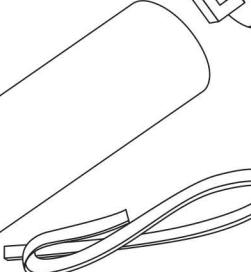


030320

Body tube / Tubo del cuerpo / Tube du corps

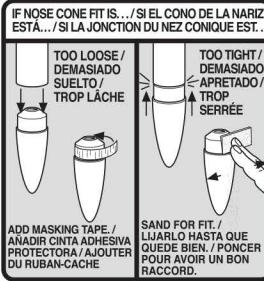
072603

Nose cone insert / Inserción del cono de la nariz / Insertion du nez conique



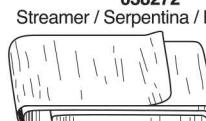
070323

Nose cone / Cono de la nariz / Nez conique



038366

Shock cord / Cuerda de tensión / Sandow



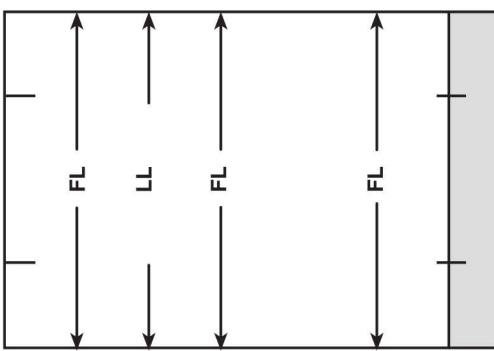
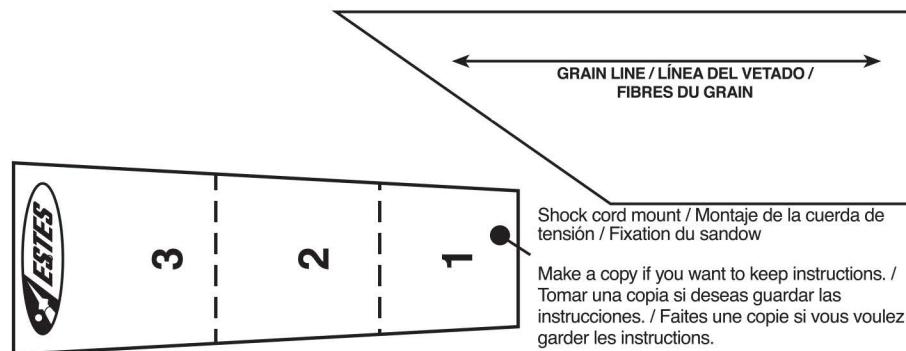
037523-1

Self-stick decal (not shown) / Calcomanía auto-adhesiva (no ilustrada) / Décalcomanie autocollante (non représentée)

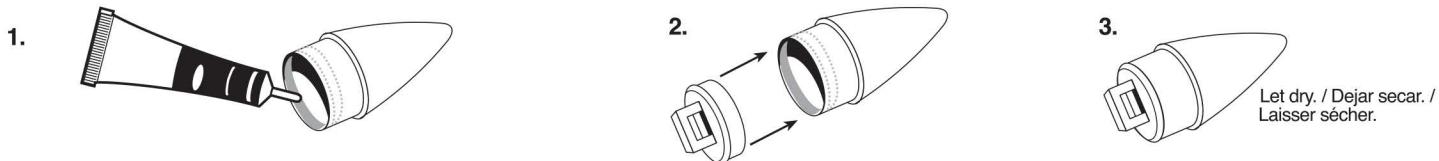
038272

Streamer / Serpentina / Banderole

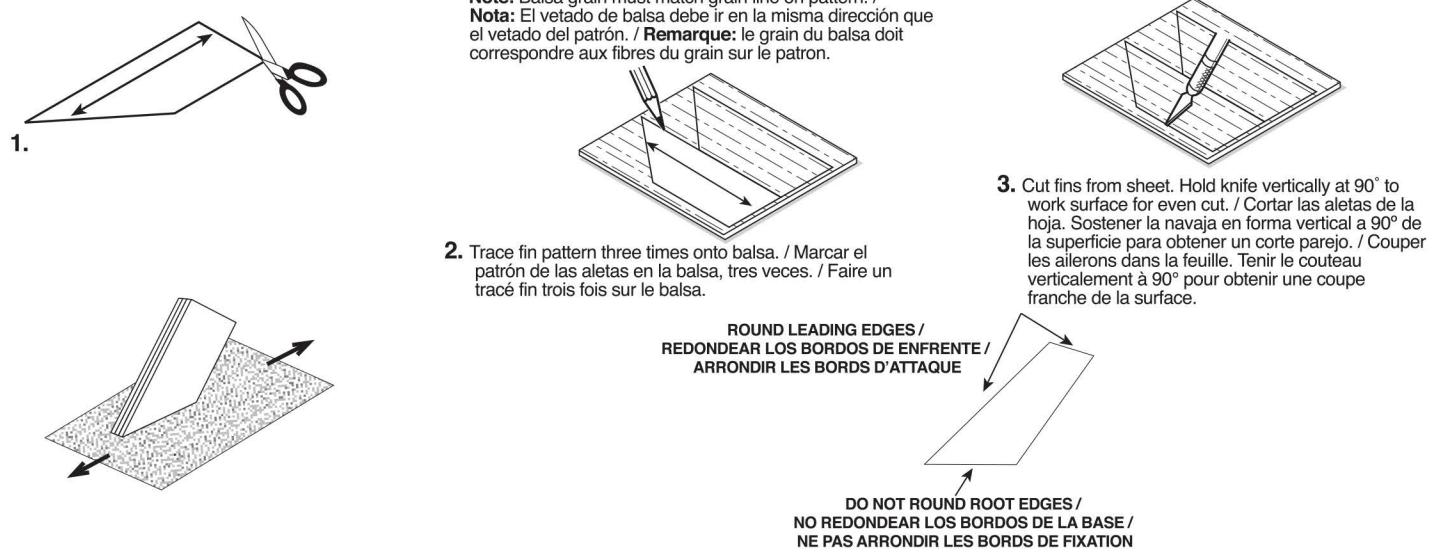
PATTERN SECTION / SECCIÓN DE LOS PATRONES / SECTION DES PATRONS



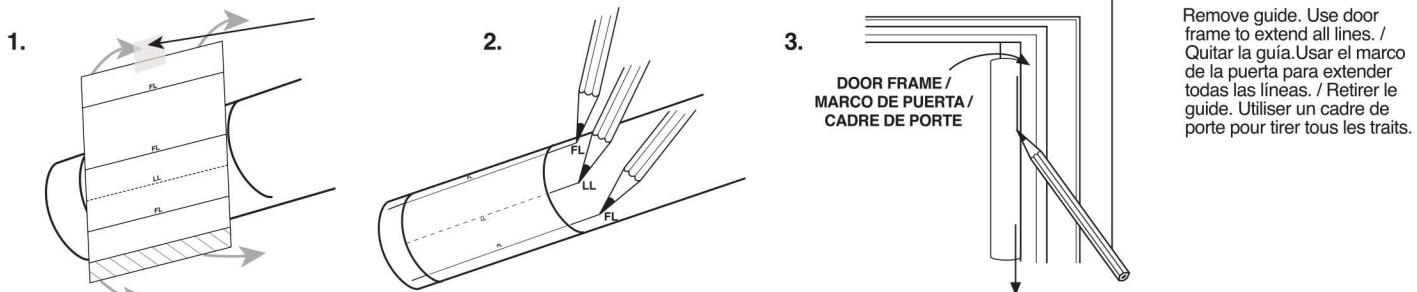
ASSEMBLE NOSE CONE / ENSAMBLAJE DEL CONO DE LA NARIZ / ASSEMBLER LE NEZ CONIQUE



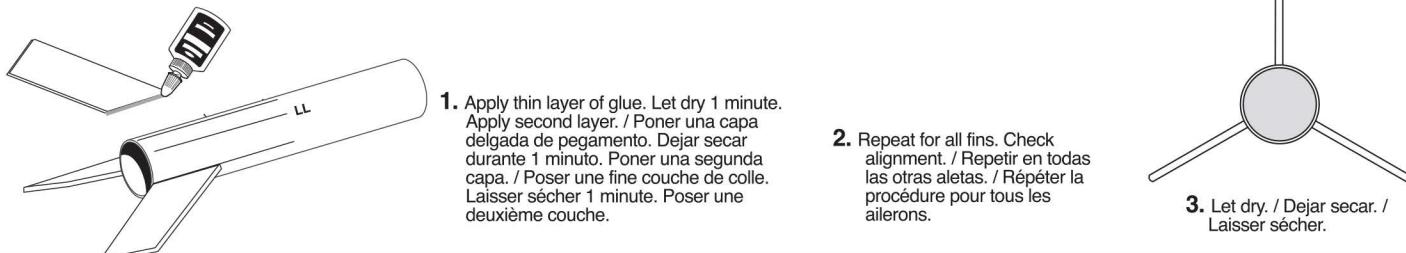
PREPARE FINS / PREPARAR LAS ALETAS / PRÉPARER LES AILERONS



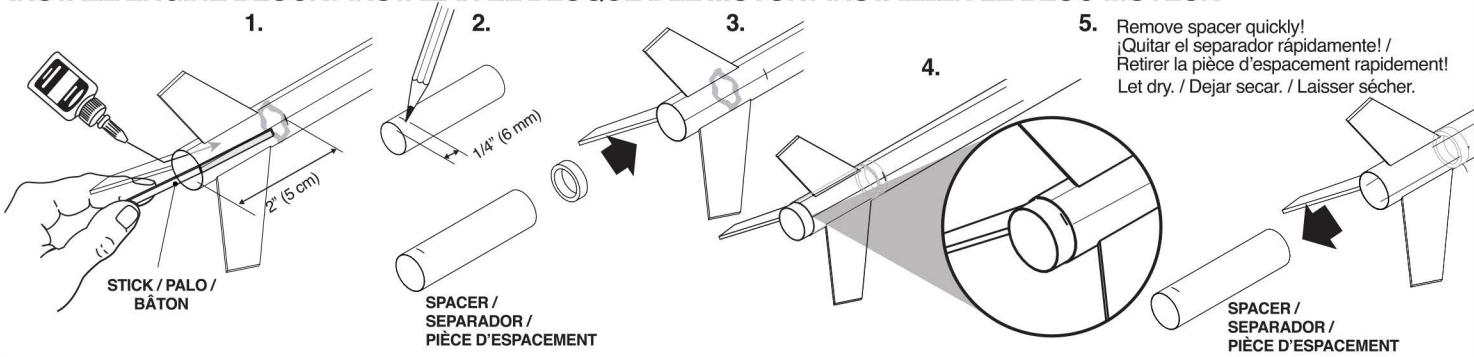
TUBE MARKING / COMO HACER EL TUBO / MARQUAGE DU TUBE



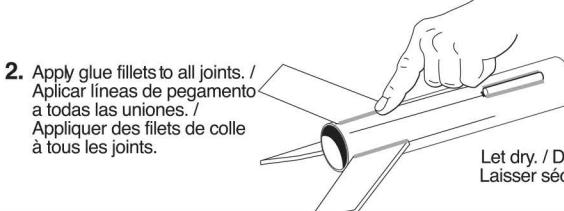
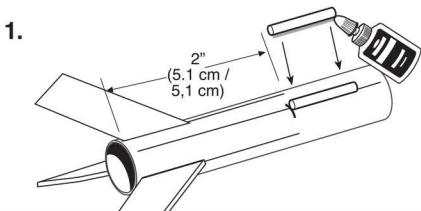
ATTACH FINS / PEGAR LAS ALETAS / ATTACHER LES AILERONS



INSTALL ENGINE BLOCK / INSTALAR EL BLOQUE DEL MOTOR / INSTALLER LE BLOC-MOTEUR

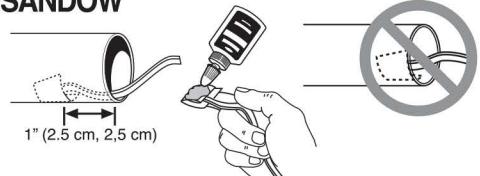
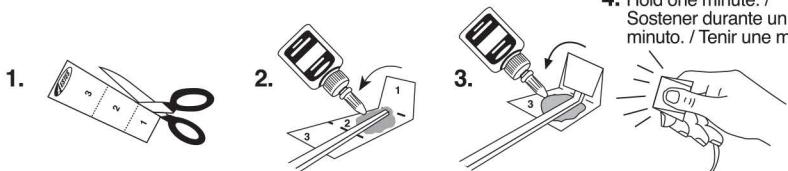


ATTACH LAUNCH LUG / PEGAR LA AGARRADERA DE LANZAMIENTO / FIXER LES COSES DE LANCEMENTS



Let dry. / Dejar secar. / Laisser sécher.

ATTACH SHOCK CORD / PEGAR LA CUERDA DE TENSIÓN / ATTACHER LE SANDOW



5. Hold until glue sets. Let dry. / Sostenerla hasta que el pegamento se cuaje. Dejar secar. / Tenir jusqu'à ce que la colle se mette en place. Laisser sécher.

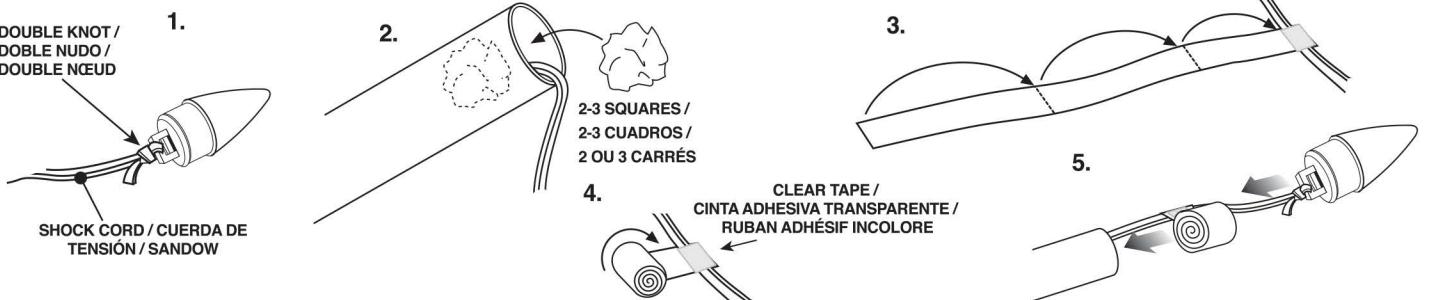
ROCKET FINISHING / TERMINADO DEL COHETE / FINITION DE LA FUSÉE

Spray rocket with white primer, let dry & sand. Repeat until rocket is smooth, then paint. Apply decals after paint is dry. / Rociar el cohete con base de pintura blanca, dejar secar & lijar. Repetir el proceso hasta que el cohete quede liso. Despues pintar. Poner las calcomanías despues de que la pintura se seque. / Vaporiser la fusée avec un apprêt blanc, laisser sécher et poncer. Répéter jusqu'à ce que la fusée soit lisse. Peindre ensuite. Poser les décalcomanies une fois que la peinture est sèche.



Refer to packaging for suggested decal placement. / Ver en el embalaje sugerencias sobre en donde colocar la calcomanía. / Voir l'emballage pour la pose des décalcomanies suggérée.

PREPARE FLIGHT RECOVERY / PREPARACIÓN DE LA RECUPERACIÓN DE VUELO / PRÉPARATION DE LA RÉCUPÉRATION DU VOL



NOTE: Only Estes Recovery Wadding recommended.

NOTA: Se recomienda únicamente la Guata de Recuperación de Estes

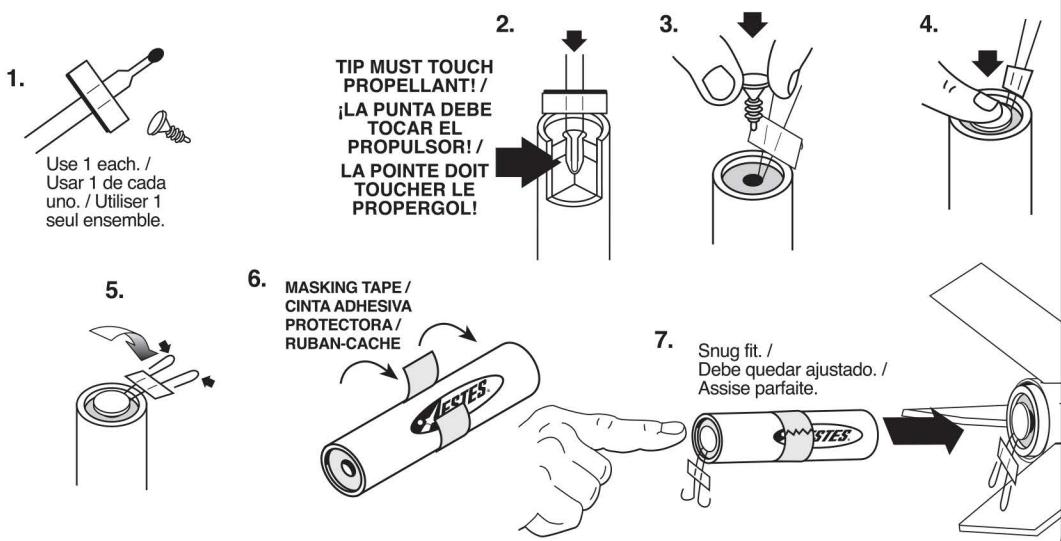
REMARQUE: Le rembourrage de récupération Estes est le seul recommandé.

NOTE: Recovery wadding and streamer must slide easily into body tube. If too tight, redo.

NOTA: La guata de Recuperación y la serpentina deben deslizarse con facilidad dentro del tubo. Si están muy apretados, vuélvelos a colocar.

REMARQUE: Le rembourrage et le banderole de récupération doivent coulisser facilement dans le tube du corps. Si c'est trop serré, recommencer.

PREPARE ENGINE / PREPARAR EL MOTOR / PRÉPARER LE MOTEUR



KEY ALWAYS OUT UNTIL FINAL COUNTDOWN! /

¡NUNCA PONGAS LA LLAVE ANTES DEL CONTEO REGRESIVO FINAL! /

CLÉ JAMAIS INTRODUIRE AVANT LA FIN DU COMPTE À REBOURS !

1...

MASKING TAPE /
CINTA ADHESIVA PROTECTORA /
RUBAN-CACHE

2...

3...

4...

5...

4... 3... 2... 1...



PRECAUTIONS PRECAUCIONES PRÉCAUTIONS



NAR Safety Code
Código de Seguridad NAR
Code de sécurité N.A.R.



NO DRY GRASS OR WEEDS

NO PASTO SECO O MALEZA

PAS D'HERBE OU DE MAUVAISES HERBES SÈCHES

PRE-LAUNCH CHECK For safety, never launch a damaged rocket. Check the rocket's body, nose cone and fins. Also, check the engine mount, recovery system and launch lug(s). Repair any damage before launching the rocket.

FLYING YOUR ROCKET Choose a large field (500 ft [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) SAFETY CODE.

MISFIRES TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the starter clips and remove the engine. Take the plug and starter out of the engine. If the starter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new starter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.

REVISIÓN ANTES DEL LANZAMIENTO Por tu seguridad, nunca lances un cohete dañado. Revisa el cuerpo del cohete, el cono de la nariz y las aletas. También, revisa el soporte del motor, el sistema de recuperación y la(s) agarradera(s) de lanzamiento. Si hay algún daño, repáralo antes de lanzar el cohete.

PARA VOLAR EL COHETE Encuentra un campo grande (500 pies [152m] cuadrados) sin maleza o pasto café. Entre más grande sea el área de lanzamiento, más grandes serán las probabilidades de que recuperes tu cohete. Los campos de fútbol y los parques son muy buenas opciones. Lánzalo únicamente cuando haya muy poco viento o no haya viento y cuando haya buena visibilidad. Siempre sigue las instrucciones del Código de Seguridad de la Asociación Nacional de Cohetes (NAR por sus siglas en inglés)

FALLAS SACÁ LA LLAVE DEL CONTROLADOR. ¡ESPERA UN MINUTO ANTES DE ACERCARTE AL COHETE! Desconecta las pinzas del arranque y quita el motor. Sacá el tapón de seguridad y el arranque del motor. Si el arranque se quemó, funcionó pero no encendió el motor ya que no estaba tocando el propelente dentro del motor. Pon otro arranque hasta adentro del motor sin doblarlo. Empujar el tapón de seguridad hasta ponerlo en su lugar. Repite los pasos indicados en Conteo Regresivo y Lanzamiento.

CONTRÔLE AVANT LANCEMENT Pour des raisons de sécurité, ne jamais lancer une fusée endommagée. Vérifier le corps, le nez conique et les ailerons de la fusée. Vérifier aussi le bâti moteur, le système de récupération et la ou les cosses de lancement. Réparer tout dommage avant de lancer la fusée.

VOL DE LA FUSÉE Choisir un grand champ (152 m²) sans mauvaises herbes sèches ni herbe marron. Plus l'aire de lancement est grande, meilleures sont les chances de récupération de la fusée. Les terrains de football et terrains de jeux sont parfaits. Lancer seulement quand il y a peu ou pas de vent et une bonne visibilité. Toujours observer le CODE DE SÉCURITÉ de l'Association nationale de fuséologie (N.A.R., É.-U.).

RATÉS D'ALLUMAGE ENLEVER LA CLÉ DU CONTRÔLEUR. ATTENDRE UNE MINUTE AVANT DE S'APPROCHER DE LA FUSÉE! Déconnecter les pinces de le démarreur et retirer le moteur. Retirer la fiche et le démarreur du moteur. Si le démarreur a brûlé, il a fonctionné mais n'a pas allumé le moteur parce qu'il ne touchait pas le propergol à l'intérieur du moteur. Placer un démarreur neuf dans le moteur sans le courber. Pousser la fiche en place. Répéter les étapes de compte à rebours et lancement.

ESTES LAUNCH SUPPLIES NEEDED

(Sold Separately)

- Launch Pad
- Launch Controller
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Estes Engines: 1/2A6-2, A8-3 (First Flight), A8-5 B4-4, B6-4, B6-6, C6-5, C6-7

MATERIALES DE ESTES NECESARIOS PARA EL LANZAMIENTO

(Se venden por separado)

- Plataforma de Lanzamiento
- Controlador de Lanzamiento
- Guata de Recuperación
- Arranques (con motores)
- Tapones (con motores)
- Motores de Estes: 1/2A6-2, A8-3 (primer vuelo), A8-5 B4-4, B6-4, B6-6, C6-5, C6-7

FOURNITURES DE LANCEMENT ESTES NÉCESSAIRES

(Vendues séparément)

- Base de lancement
- Contrôleur de lancement
- Rembourrage de récupération
- Démarrateurs (avec les moteurs)
- Fiches (avec les moteurs)
- Moteurs Estes: 1/2A6-2, A8-3 (premier vol), A8-5 B4-4, B6-4, B6-6, C6-5, C6-7

Insert key, push down hard. Bulb will light. /

Poner la llave, empujarla hacia abajo con fuerza. El foco se encenderá. /

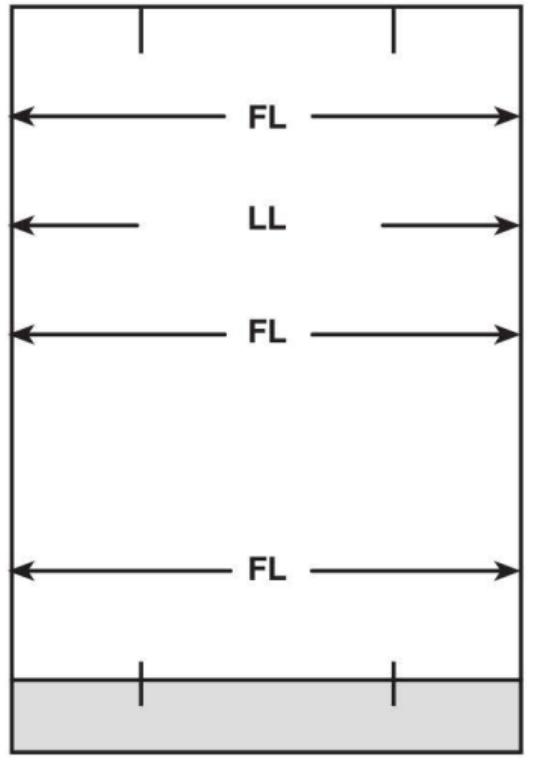
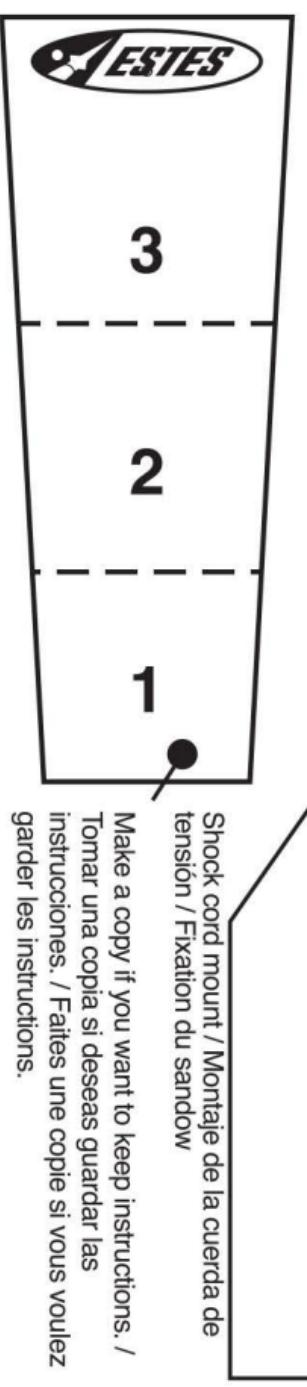
Insérer la clé, enfoncez vigoureusement. L'ampoule va s'allumer.

While holding key down FIRMLY, press launch button until LIFTOFF! /

¡Mientras sostienes la llave con FIRMEZA hacia abajo, oprime el botón de lanzamiento hasta que DESPEGUE! /

Out en maintenant FERMEMENT la clé enfoncée, appuyer sur le bouton de lancement jusqu'au DECOLLAGE! /

PATTERN SECTION / SECCIÓN DE LOS PATRONES / SECTION DES PATRONS



Make a copy if you want to keep instructions. /
Tomar una copia si deseas guardar las
instrucciones. / Faites une copie si vous voulez
garder les instructions.

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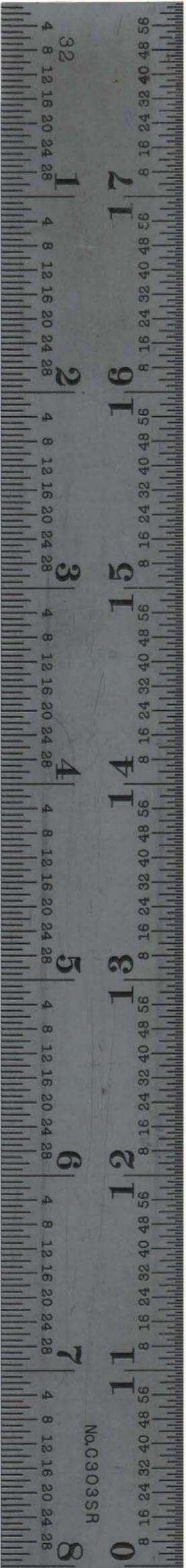
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STERLING

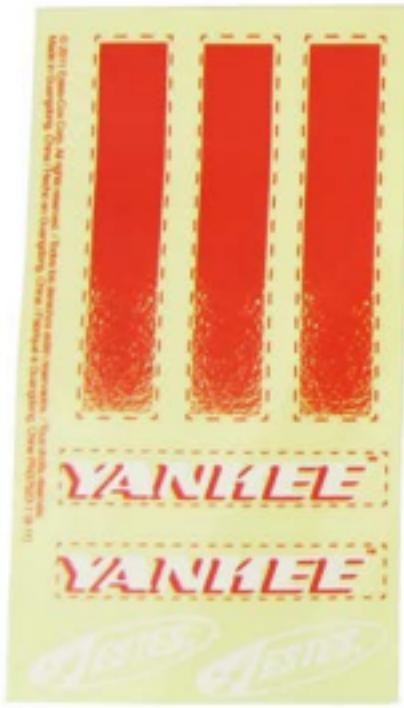
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YANKEE™

Flying Model Rocket Kit

Modello di cohet volador para avioneta

KIT DE RUSEE MINIATURE VOLANTE

Skill Level
Nivel de habilidad
Niveau de difficulté

1

Easy to build!
Fácil de construir!
Facile à construire!



1700 ft
518 m

Max recommended engine:
Rapidez recomendada:
Máximo recomendado:
Long. x diam. en mm: 100.4 x 25.4
Peso: 100 g
Color: Rojo, Blanco, Negro

* First launch
* primer lanzamiento
* premier lancement



Largo:	11 in
Largura:	27.4 mm
Longueur:	

Diámetro:	1.1 in
Diametro:	28 mm
Diamètre:	

Pesos:	
Pesos máximos:	
Poids maximum:	

100 g

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