





ESTES INDUSTRIES
1295 H Street
Penrose, CO 81240 USA

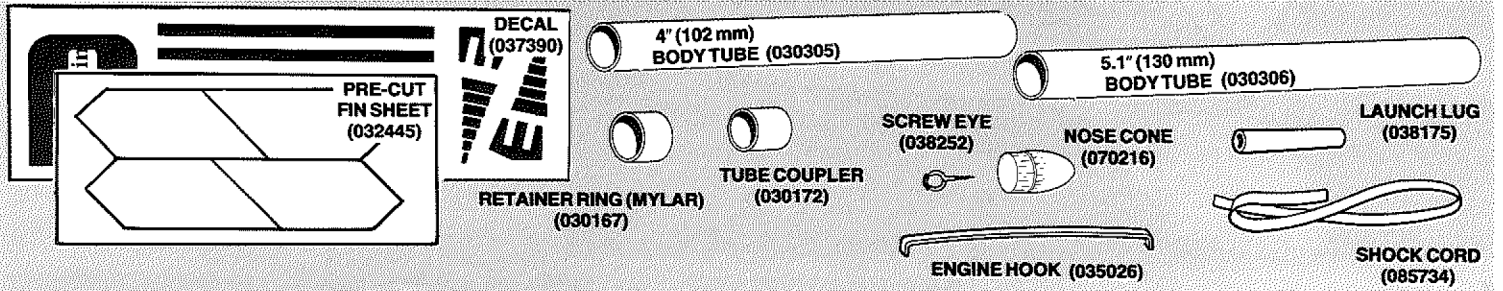
Jammin'™ ASSEMBLY TIP

FLYING MODEL ROCKET #0890

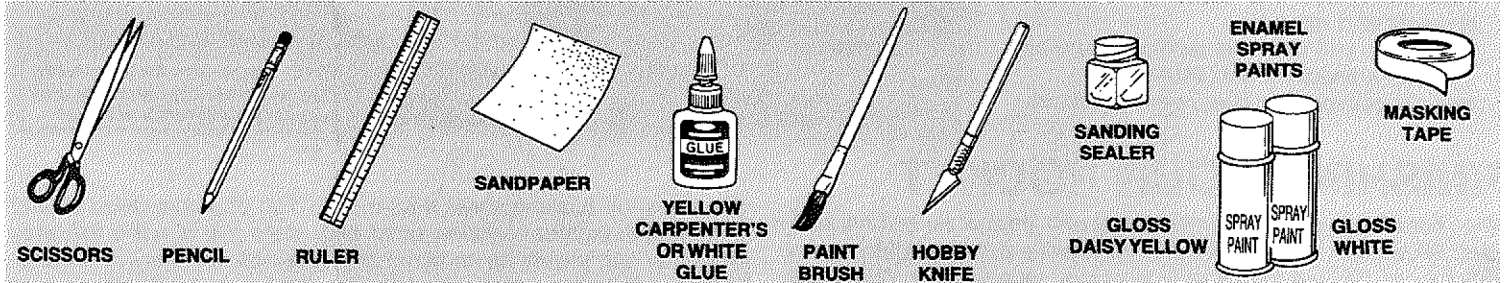
Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

PARTS AND SUPPLIES

Locate the parts shown below and lay them out on the table in front of you.



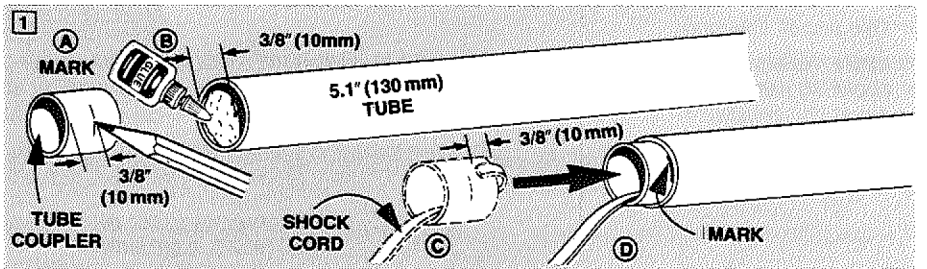
In addition to the parts included in the kit you will also need:



ROCKET ASSEMBLY

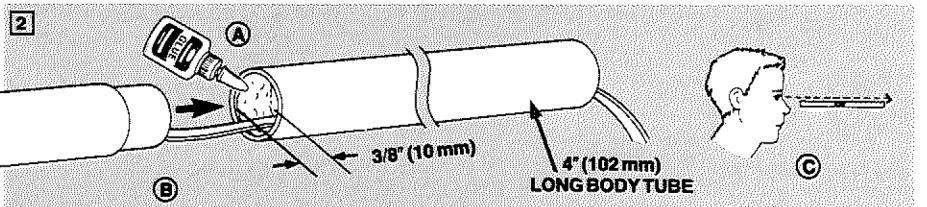
1.

- Mark tube coupler 3/8 inch (10 mm) from one end.
- Apply a ring of carpenter's glue 3/8" (10 mm) long inside one end of 5.1" (130 mm) long body tube.
- Slip end of shock cord through tube coupler and wrap over 1/8" (3 mm).
- Insert the tube coupler in one quick motion until the mark on the tube coupler is even with the end of the body tube. The shock cord should be tightly captured. Cut off excess shock cord if necessary. Allow glue to dry.



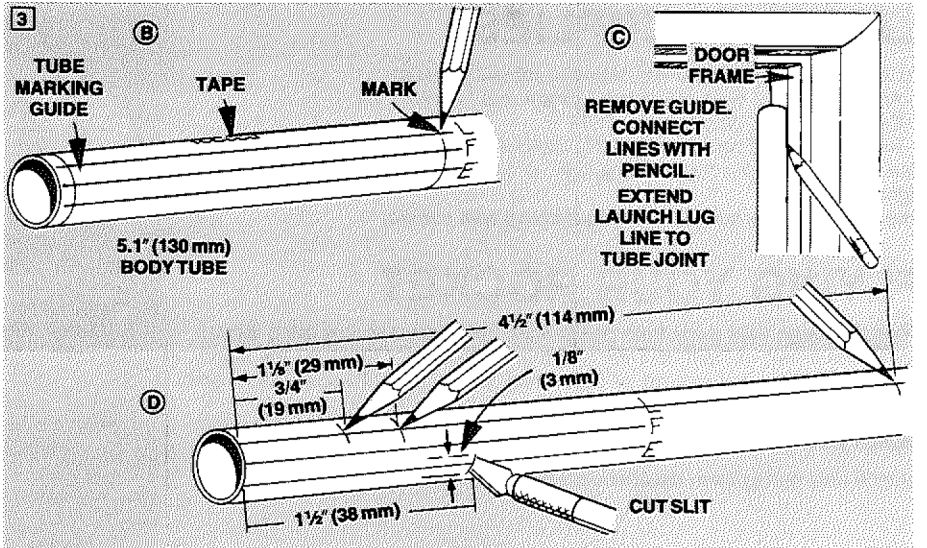
2.

- Apply a 3/8" (10 mm) ring of carpenter's glue inside one end of the 4" (102 mm) long body tube and thread the free end of shock cord through.
- Insert the tube coupler in one quick motion until the two tubes are butted together.
- Make sure tubes are straight. Allow glue to dry.



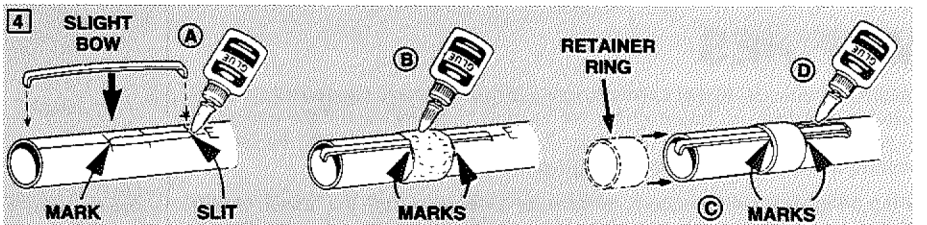
3.

- Cut out tube marking guide from the top of page 2.
- Wrap the guide around the end of the 5.1" (130 mm) long body tube. Apply tape. Mark the tube at the arrows. Identify each fin line with an F, the engine hook line with an E, and the launch lug line with an L. Remove the guide.
- Draw straight lines connecting each pair of marks. Extend the launch lug line to the tube joint.
- Mark the launch lug line at 4 1/2" (114 mm) from the end of the tube. Mark the body tube at 3/4" (19 mm) and 1 1/8" (29 mm) from rear of body tube. Cut a 1/8" (3 mm) wide slit on the engine hook line at 1 1/2" (38 mm) from the rear of the tube.



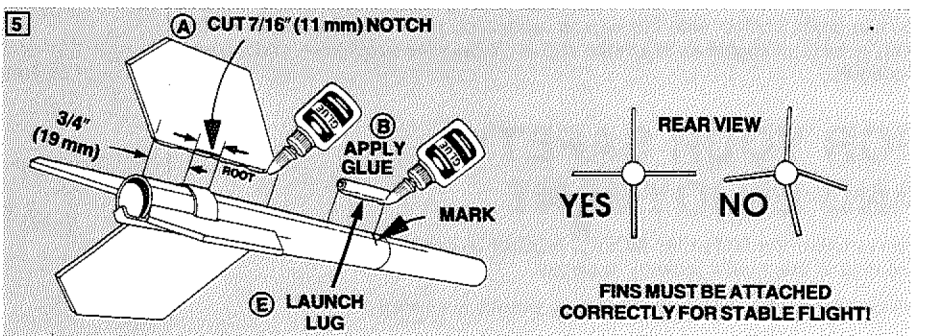
4.

- Apply a line of glue on the engine hook line between the slit and the 3/4" (19 mm) line. Insert the end of the engine hook into the slit.
- Apply a ring of carpenter's glue between the 3/4" (19 mm) and 1 1/8" (29 mm) marks.
- Slide the retainer ring in one quick motion over the engine hook until centered between the two marks. Wipe off excess glue.
- Apply a line of reinforcing glue along sides of the engine hook in front of the retainer ring. Let glue dry completely.



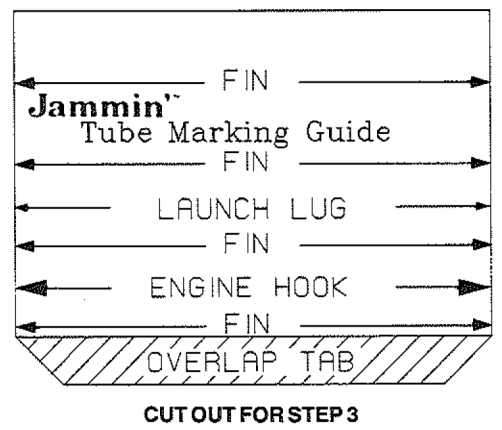
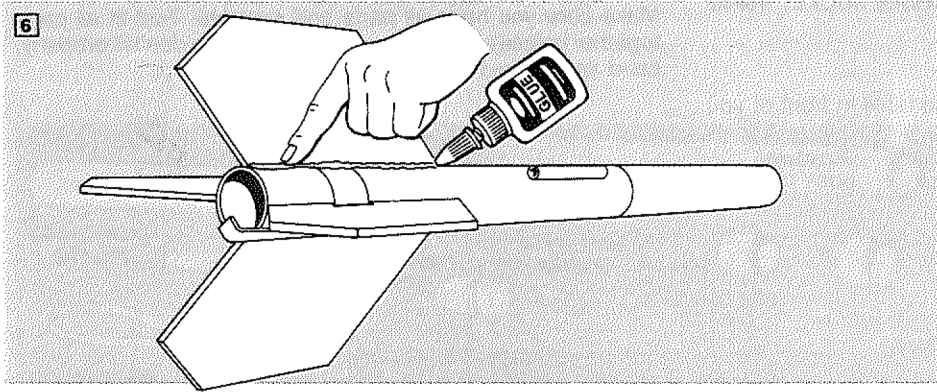
5.

- Remove fins from pre-cut sheet. Cut a 7/16" (11 mm) long notch in root edge of each fin beginning 3/4" (19 mm) from rear of root edge. Test to see if each fin notch straddles the retainer ring completely.
- Apply a small line of carpenter's glue along fin root edge.
- Place fin on body tube line. Remove and allow glue to become tacky.
- Add a bit more glue. Place back on tube line. Repeat for remaining fins.
- Use carpenter's glue to attach launch lug straight on launch lug line with the front at the 4 1/2" (114 mm) mark.

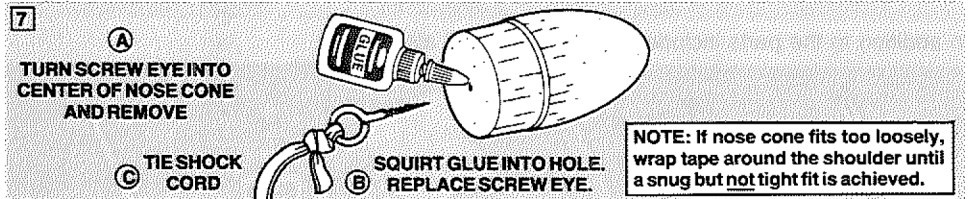


FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!

6. Apply a reinforcement of carpenter's glue on each side of fins and launch lug.



7. A. Turn screw eye into center of nose cone shoulder and remove.
 B. Squirt glue into hole and replace screw eye.
 C. Tie end of shock cord to screw eye.
 D. Insert shock cord and nose cone into rocket.



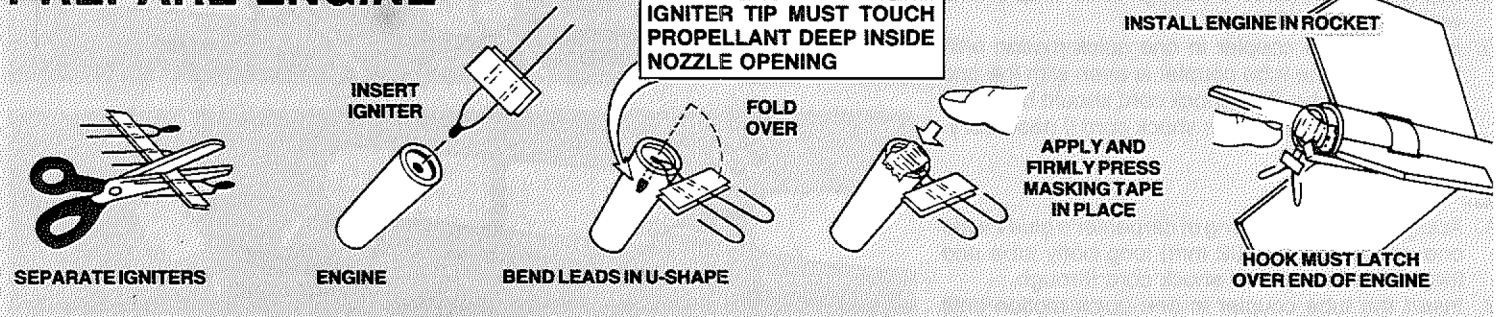
FINISHING YOUR ROCKET

When completely dry, paint entire model with gloss white enamel spray paint. Allow paint to dry overnight. Roll a piece of paper tightly around body tube at 1 3/4" (44 mm) from front of tube for next color. Apply tape. Paint forward part with gloss Daisy Yellow paint. Once the paint is dry, remove paper masking.

To apply decals, cut the purple one out first. Dip in lukewarm water for about 30 seconds, and hold until it uncurls. Refer to front of panel for decal placement.

Slip decal off backing sheet onto model. Top of purple decal should butt against bottom of yellow paint and, since this is not a full body wrap, the gap should be centered on the launch lug. **MASTER MODELERS HINT:** the clear border can be carefully cut off with a sharp knife for a crisper separation of colors. Blot away excess water. Next, place the striped decal with the top of the blue butted against the bottom of the purple and the gap centered on the launch lug like the purple decal above. Last, apply fin decals. For best results, let decals dry overnight and apply a coat of clear gloss spray to protect decals.

PREPARE ENGINE



LAUNCH SUPPLIES

To launch your rocket you will need the following items:
 —An Estes Model Rocket Launch System and Launch Pad
 —Estes Recovery Wadding No. 2274
 —Recommended Engines: 1/2A3-2T, 1/2A3-4T (First Flight), A3-4T, or A10-3T. Use 1/2A3-4T engine for your first flight to become familiar with your rocket's flight pattern.
 Use only Estes products when launching 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 250 feet (76 meters) 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.

MISFIRES

Failure of the model rocket engine to ignite is nearly always caused by incorrect igniter installation. 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.

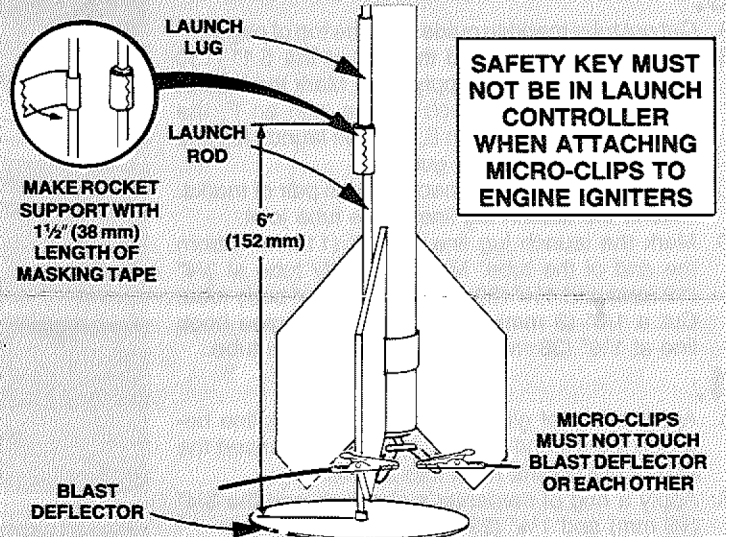
When an ignition failure occurs, remove the safety key from the launch control system, and wait one minute before approaching the rocket. Remove the expended igniter from the engine and install a new one. Be certain the coated tip is in direct contact with the engine propellant, then tape the igniter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

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

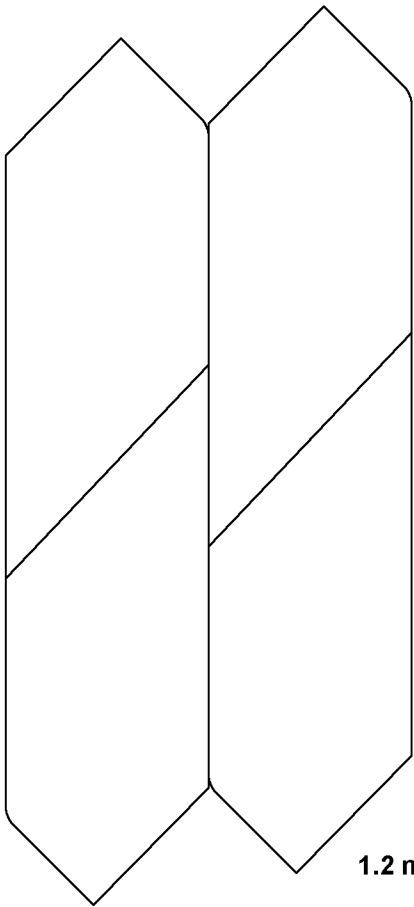
COUNTDOWN AND LAUNCH



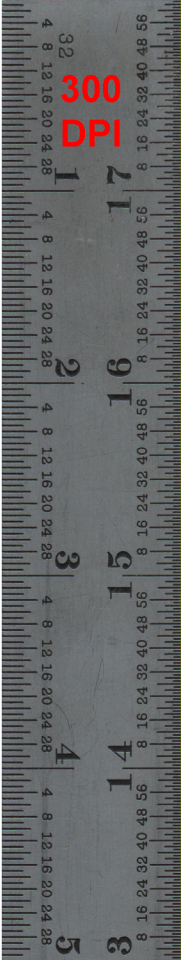
- 10 BE CERTAIN SAFETY KEY IS NOT IN LAUNCH CONTROLLER.
- 9 Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- 8 Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the 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 15 feet - 5 meters).
- 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.



1.2 mm



300
DPI



ESTES PN 037390



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PARTS LIST KIT NO. 0890 - Jammin								
Quantity	Description	Type	Number	Details1	Details2	Details3	Details4	Comment
1	PAPER BODY TUBE	BT-5?	30305	4" long	0.515" ID	0.541" OD	0.013" wall	Glassine
1	PAPER BODY TUBE	BT-5BJ	30306	5.1" long	0.515" ID	0.541" OD	0.013" wall	Glassine
1	MYLAR RETAINER RING	HR-5	30167	.375" long	.56" ID	.57" OD	.005" wall	Fits over BT-5
1	STAGE COUPLER	JT-5	30172	0.455" ID	0.513" OD	0.5" long	fits BT-5	Red
1	Screw Eye (Small)	SE-2A	38252	3/4" long				
1	BALSA NOSE CONE	BNC-5V	70216	.75" long	.541" dia.	.25" shoulder		PNC-5V alternate
1	LAUNCH LUG	LL-2A	38175	5/32" ID	1/8" rod	1.25" long		Mylar
1	ENGINE HOLDER	EH-3	35026	1.8" long	.125" wide	.025" thick	13mm	Mini
1	Shock Cord	SC-1B	85734	1/8" wide	12" long			Rubber
1	Diecut Fins	N/A	32445	3" wide	5" long	1.2mm thick	heavy card	Scan
1	Decal	SD-0890	037390	2" wide	6" long	Red,Blu,Yel	Waterslide	Scan



A DAMON COMPANY

Flying Model Rocket

Recommended for 10 to Adult.
Supervision Suggested
For Those Under 12.
1 MODEL KIT
Paint and Glue
not included.
1 MODELE
REUIT
Peinture et
Colle non
comprises.

Flies Over and Over
To **450** feet (137 m)

SKILL LEVEL **1**
FOR THE BEGINNING MODELER

Jammin



Length: 10.5 in. (26.7 cm)
Dia.: .541 in. (13.7 mm) Weight: .45 oz. (12.6 g)
Recommended Engines: 1/2A3-2T, 1/2A3-4T (First Flight), A3-4T or A10-3T

SUPER SPORT FLIER

#0890



0 47776 00890 8

Fly Estes

Model Rockets



A DAMON COMPANY

Made In USA
35600



"Be sure to follow the enclosed NAR/HIA SAFETY CODE."

MODEL ROCKET FLIGHT SEQUENCE

This kit has been designed specifically for use only with Estes model rocket engines.*

MINIMUM RECOMMENDED LAUNCH SITE DIAMETER IN FEET

Engine	Max. Alt.	Site Dia.
1/2A	200'	50'
A	400'	100'
B	800'	200'
C	1600'	400'

LAUNCH SITE MUST BE FREE OF OBSTRUCTIONS AND HIGHLY FLAMMABLE MATERIALS.

FULL 1 YEAR WARRANTY & SAFETY CODE ENCLOSED.

Plastic bags can be dangerous. To avoid danger of suffocation, keep this bag away from babies and children.

Les sacs de plastique peuvent être dangereux. Pour éviter le danger de suffocation, ne laissez pas ce sac à la portée des bébés ni des enfants.

ESTES IND., 1295 H ST., PENROSE, CO 81240

USE ONLY ESTES PRODUCTS TO LAUNCH THIS MODEL ROCKET

Flies Over and Over
To

450 feet (137 m)

SKILL
LEVEL

1

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TM
jammin



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