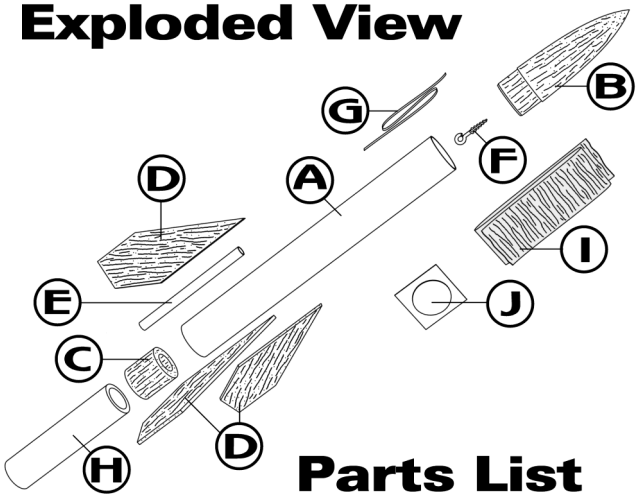
Exploded View



Parts List

Item	Estes Part #	Semroc Part #	Description
A	BT-3B	BT-30B	Body Tube 6.125" Long
B	BNC-3A	BNC-30E	Balsa Nose Cone
C	EB-1A	EB-30	Balsa Engine Block
D	BFS-2	FES-K2	Laser-Cut Balsa Fins
E	LL-1B	LL-2B	Launch Lug
F	SE-1	SE-1	Screw Eye
G	SC-1A	SC-1A	Shock Cord 9"
H	Not Incl.	MC-727	Empty Casing
I	SM-1A	SM-1A	Streamer 1" x 8"
J	TD-1	TD-1	Tape Disc

100% SATISFACTION GUARANTEE

If you are not 100% satisfied with your Semroc product, we will make it right by providing whatever you consider fair, from refund to replacement.

Contact us at:
Semroc Astronautics Corporation
Customer Service Department
P.O. Box 1271
Knightdale, North Carolina 27545

JOIN THE NAR!

Sign up online at www.nar.org to join the premier model rocketry organization. Semroc fully supports the National Association of Rocketry and recognizes it as the sport's official voice. Check online at www.semroc.com/nar for promotions just for NAR members.

MARK™ XKIT™

by SEMROC



CLASSIC BEGINNER KIT

RUBBER SHOCK CORD

BALSA ENGINE BLOCK

1961 Retro

Designed by: G. Harry Stine

LASER CUT FINS

FLYING MODEL ROCKET KIT

MADE IN THE USA

Instructions not included. Available online.

SEMROC

Made in the U.S.A by Semroc Astronautics Corporation - Knightdale, N.C. 27545

Mark™
Kit No. XES-K2

Specifications		Engine	Approx. Altitude
Body Diameter	.767" (1.9 cm)	A8-5	600'
Length	9.2" (23.4 cm)	B6-6	1000'
Wing Span	3.1" (7.9 cm)	C6-7	1700'
Net Weight	0.4 oz. (11.3 g)		

STREAMER RECOVERY

What is an xKit™?

A Semroc xKit™ is a kit designed for the expert modeler. It is a reproduction of the materials found in an early, historically significant model rocket kit. The parts are close enough that the original instructions can be used to construct the kit. Copies of original instructions of many early out-of-production kits are available online from several sources, the two best-known being Jimz and oldrocketplans.com. The xKit™ line is only available online and is intended for advanced builders that have experience with the instructions and designs from the early days of model rocketry.

About Estes Industries, Inc.

In July 1958, G. Harry Stine of Model Missiles, Inc. in Denver, Colorado approached Vern Estes about making model rocket engines for them. On January 15, 1959, Vern's automated model rocket engine fabricating machine, "Mabel", produced the first of many millions of Estes model rocket engines. In 1960, Estes was producing more engines than Model Missiles could sell. Vern and his wife Gleda opened a mail order rocket company and introduced the Astron Scout and Astron Mark.

In 1961, a catalog was mimeographed and hand stitched on Gleda's sewing machine. Later that year, Estes Industries had outgrown the confined space in Denver. In December 1961, the entire operation was moved to an old farm in Penrose, Colorado quickly establishing the small town as the "Model Rocket Capital of the World."

Estes Industries was sold to Damon in September 1969. The name Estes is synonymous with model rocketry. Almost everyone remembers growing up firing Estes rockets or knowing someone that did. Estes Industries has introduced millions of youngsters of all ages to model rocketry for almost half a century.

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Box 1271 Knightdale, NC 27545 (919) 266-1977

About the Mark™

The Astron Mark was designed for Vern Estes by G. Harry Stine. G. Harry Stine had been a founder of Model Missiles, Inc. and would later be known as the "father of model rocketry." Vern Estes had designed the original Scout kit that used tumble recovery and needed a second kit to demonstrate other recovery methods. The Mark was a basic design using the new Estes engines. It was an evolution from the Carlisle Mark I and Mark II and kept the same name. Later, the Astron Mark would undergo more revisions and change to a new version called the Mark II. The Astron Mark was introduced in the 1961 Catalog as Vern and Gleda Estes' second kit with Catalog #K-2 and an introductory price of $1.25.

The Semroc Mark™ xKit™ is a very close approximation of the original kit. Laser-cut fins are provided using the original patterns as models. The original balsa engine block is provided along with the original rubber shock cord instead of the later elastic cord.

Plans are not provided in this kit but they are available online at http://www.dars.org/jimz/k-02.htm thanks to the tireless efforts of Jim Zalewski and the generosity of Estes Industries in allowing him to help preserve the past.

Construction Notes

1. After downloading the instructions, they should be read and understood before beginning construction.

2. The cut-and-slit method of attaching the shock cord to the body tube was always hard to get a smooth surface on the outside of the model. Even so, it is still one of the most reliable methods of attaching a rubber shock cord to the body tube. An internal mount can be used, but the shock cord "bump" is more like the original.

3. The provided balsa engine block should be coated heavily on the inside with wood glue. Modern delay charges burn engine blocks more than the engines used at the time the Mark was produced.

4. The streamer is small, but it is the original size. Using engines larger than A impulse will be hard to recover, even in a large field.