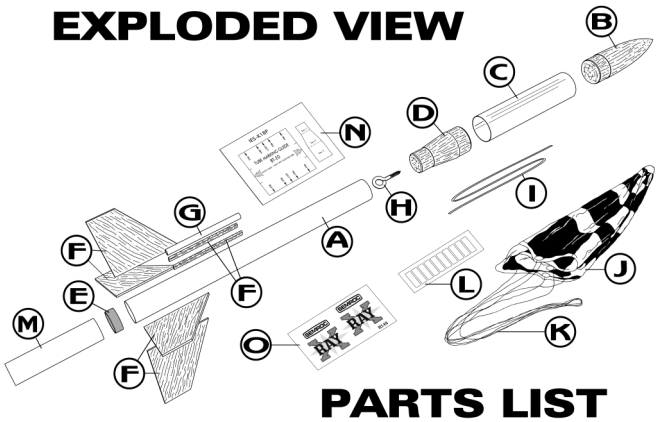
EXPLODED VIEW



PARTS LIST

Item	Estes Part #	Semroc Part #	Description
A	BT-20B	BT-20B	Body Tube
B	BNC-50K	BNC-50K	Balsa Nose Cone
C	PST-50S	PST-50S	Payload Section Tube
D	TA-2050A	TA-2050A	Balsa Adapter
E	EB-20A	EB-20A	Engine Block
F	BFS-20	FES-K18	Laser-cut Balsa Fins
G	LL-1B	LL-2B	Launch Lug
H	SE-2	SE-2	Screw Eye
I	SC-1B	SC-1B	Shock Cord
J	PK-12A	RC-12RW	Chute Pak
K	SLT-12	SLT-72	Shroud Line
L	TD-2J	TD-2J	Tape Strips
M	EC-2	MC-727	Empty Casing
N	SP-18	IES-K18P	Pattern Sheet
O	Not Incl.	DES-K35	Decal Sheet

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.

SEMROC

X-RAY™

XKIT™

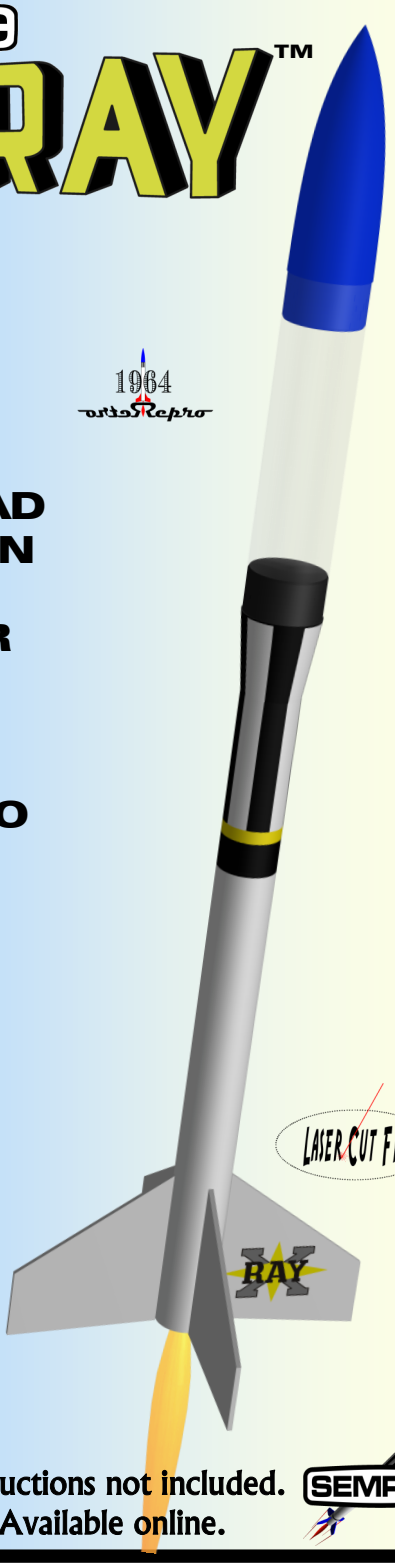
1964 Retro

CLEAR PAYLOAD SECTION

RUBBER SHOCK CORD

EASY TO BUILD

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

X-RAY™
Kit No. XES-K18

Specifications		Engine	Approx. Altitude
Payload Diameter	.976" (2.5 cm)	A8-3	350'
Body Diameter	.736" (1.9 cm)	B6-4	750'
Length	16.6" (42.2 cm)	C6-5	1300'
Wing Span	4.6" (11.7 cm)		
Net Weight	0.7 oz. (19.9 g)		

PARACHUTE 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.

July 15, 2008

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

About the X-Ray™

The Astron X-Ray was an early clear payload kit that was released in late 1964 by Estes Industries, Inc. Since the catalog was late getting out for 1965, the X-Ray was announced in the March edition of the *Model Rocket News*, Volume 5, Number 1. The Astron X-Ray was Catalog #K-18 and had an introductory price of $1.75.

The Semroc X-Ray™ xKit™ is a close approximation of the original kit. Laser-cut fins are provided using the original patterns as models. A rubber shock cord is used like the original model. All parts are selected to be as close to the original as possible.

Plans are not provided in this kit but they are available online at

http://www.dars.org/jimz/k-18.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 online instructions do not cover decals, which were not included with the earliest models. Use the front cover of these instructions for placement similar to later versions of the model that did have decals.

3. Tape strips are provided for the clear payload section, but cyanoacrylate (CA) glue may work better and provide a neater attachment method.

4. The original method of "cut-and-slit" to mount the rubber shock cord was replaced in later years with the paper shock cord mount. One similar to the later versions is supplied on the Pattern Sheet if you want to avoid the slits in the tube.

5. The X-Ray had several paint schemes over the years. The one on the cover is typical of the middle years of production.