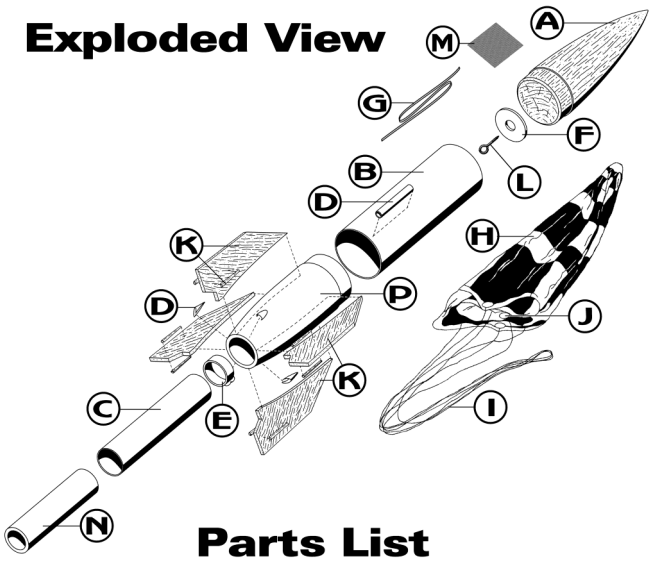
Exploded View

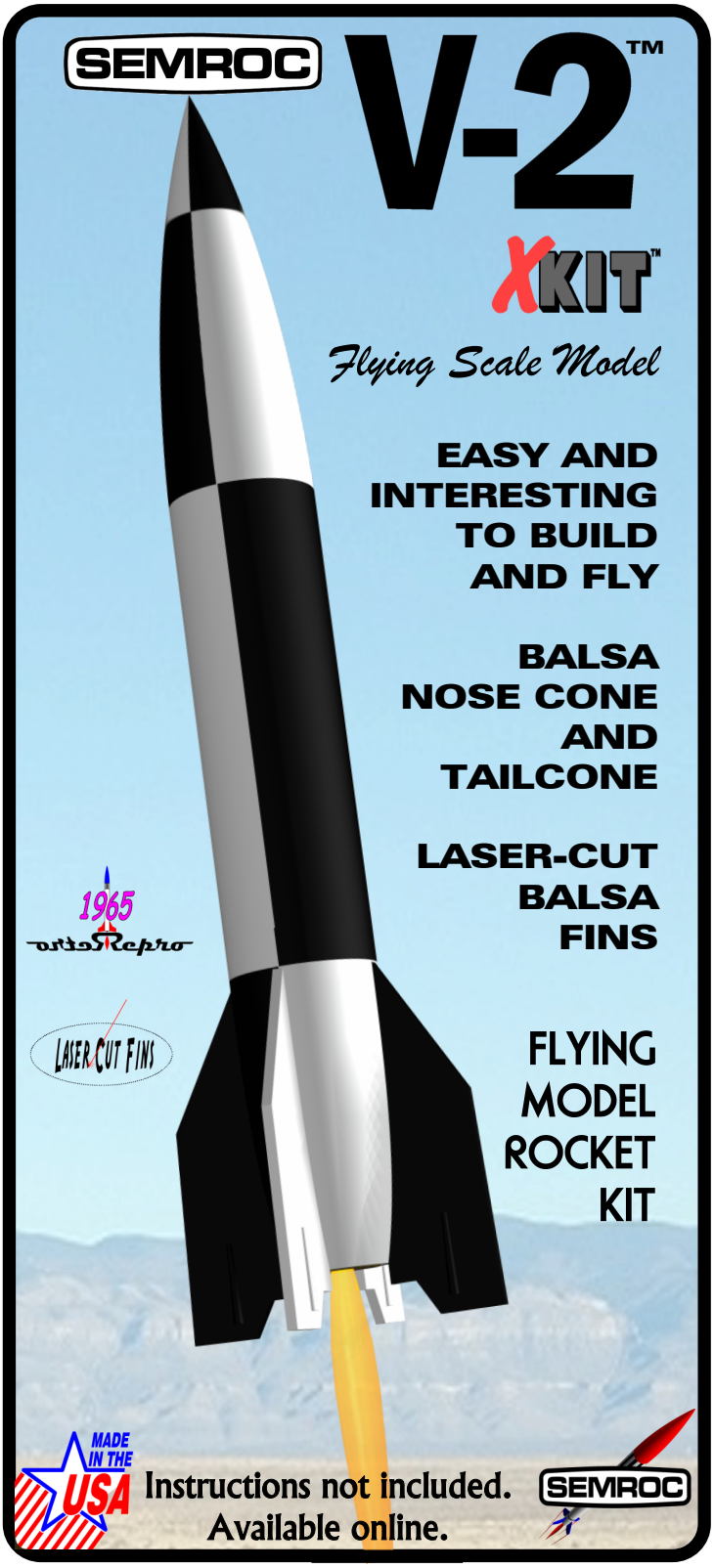


Parts List

Item	Estes Part #	Semroc Part #	Description
A	BNC-55F	BNC-55F	Balsa Nose Cone
B	BT-55S	BT-55S	Body Tube
C	BT-20G	BT-20G	Body Tube
D	LL-2A	LL-2A	Launch Lugs (3)
E	EB-20A	EB-20A	Engine Block
F	NCW-1	WW-8	Washer Weight
G	SC-1	SC-1	Shock Cord
H	PK-12A	RC-12RW	Parachute Canopy
I	SLT-1B	SLT-72	Shroud Line
J	TD-2G	TD-6	Tape Discs
K	BFS-30	FES-K22	Laser-cut Balsa Fins
L	SE-1	SE-12	Screw Eye
M	GR-4	GR-4	Gauze Reinforcing
N	EC-2	EC-727	Empty Casing
O	SP-22	IES-K22P	Pattern Sheet
P	BTC-55Z	BTC-55Z	Balsa Tail Cone

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.



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

V-2™

Kit No. XES-K22

Specifications		Engine	Approx. Altitude
Body Diameter	1.325" (3.4 cm)	A8-3	150'
Length	11.4" (29.0 cm)	B6-4	500'
Wing Span	4.0" (10.2 cm)	C6-5	1200'
Net Weight	1.3 oz. (36.9 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 5, 2008

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

About the V-2™

The V-2 was introduced in 1965 in the Estes® 1966 Catalog. Based on the German A-4/V-2 designed in the 1940's as a military missile, the Estes® V-2 was one of their first scale models. The V-2 was able to be built as a scale model or semi-scale model with larger fins for better stability. For many early rocketeers, the V-2 was their first scale model. The V-2 was Estes® #K-22 and the original kit sold for $1.75.

The Semroc V-2 xKit™ is updated by using laser-cut fins including both the scale and semi-scale parts. The original balsa nose cone and boat tail dimensions and the original body tube sizes are used. A larger washer weight is provided for the semi-scale version.

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

http://www.dars.org/jimz/k-22.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 Center of Pressure for the scale version is 7.2" from the tip and 8.4" for the semi-scale version. The original lead weight is replaced with a much heavier steel weight in this model and will be required for stability with the semi-scale version. Up to 1/2 oz. of weight (not included) is required deep into the nose cone to make the scale version stable!

3. In Step 7, align the rings on a flat surface instead of sighting with your eye to get the fin markings aligned.

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:
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Knightdale, North Carolina 27545