



About Semroc

Semroc Astronautics Corporation was started by Carl McLawhorn in his college dorm at North Carolina State University in November, 1967. Convincing a small group of investors in his home town of Ayden, North Carolina to invest in a small corporation, the company was re-incorporated as Semroc Astronautics Corporation on December 31, 1969.

Semroc produced a full line of model rocket kits and motors. At its peak, Semroc had twenty-five full time employees working at two facilities. One was for research and development, printing, shipping, and administration. The other was outside of town and handled all production and model rocket motor manufacturing. For several years, Semroc successfully sold model rocket kits, supplies, and motors by mail-order and in hobby shops. In early 1971, Semroc became insolvent and had to close its doors.

After 31 years of dreams and preparations, Semroc Astronautics Corporation was reincorporated on April 2, 2002 with a strong commitment to helping put the fun back into model rocketry. Many years of excellent service to the rocketry community passed by until sadly, on August 11 2013, Carl passed away and left a great void in the hearts of many rocketeers. He is forever in our hearts and minds.

In February of 2015, Semroc was sold to eRockets and moved to Dayton, Ohio where it resides today. It is our goal to continue the level of service and dedication to the hobby that Carl and his family were so well known for. We strive to serve you, our customers, to the best of our abilities as we carry the vision of Carl McLawhorn boldly into the future.

About the Semroc JUPITER B™

The Jupiter B was designed to enhance the popular "Dare to be Square" from NewWay Spacemodels. Going a step beyond the square, flat top design used by the aforementioned kit, the Jupiter B evolved into its more spaceship design.

The original Jupiter B was larger than the finished model, but the material that it was constructed from had a very poor finish texture. The next model had much better finish properties, but had shrinkage problems with the glue joints. There was also a problem with the size. To help keep the costs down for shipping to you, our customers, we had to make it smaller, which changed the flight characteristics. After 7 attempts, we finally got it right, and can now bring you the new, Semroc Jupiter B.

June 2019

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SEMROC

JUPITER B™



Experience the Adventures of the Robinson Family

Laser Cut Parts

Featherweight Recovery

*Designed by:
Phil Queen*



FLYING MODEL ROCKET KIT

Made in the U.S.A by Semroc - Dayton, Ohio

JUPITER B™ Kit No. KN-06

Specifications	Engine	Approx. Altitude
Body Diameter	B6-0	100'
Height	C6-0	200'
Net Weight	1.02 oz.	

Skill Level 2

BEFORE YOU START!

Make sure you have all the parts included in this kit that are listed in the Parts List in these instructions. In addition to the parts included in this kit, you will also need the tools and materials listed below. Read the entire instructions before beginning to assemble your rocket. When you are thoroughly familiar with these instructions, begin construction. Read each step and study the accompanying drawings. Check off each step as it is completed. In each step, test-fit the parts together before applying any glue. It is sometimes necessary to sand lightly or build-up some parts to obtain a precision fit. If you are uncertain of the identity of some parts, refer to the exploded view. It is important that you always ensure that you have adequate glue joints.

TOOLS

In addition to the parts supplied, you will need the following tools to assemble and finish this kit.

White or Wood Glue Ruler
Masking Tape Ball Point Pen
Hobby Knife Spray Paint

ASSEMBLY

These instructions are presented in a logical order to help you assemble your Semroc Jupiter B quickly and efficiently. Check off each step as you complete it. We hope you enjoy putting this kit together.

SAUCER

1. Take the Saucer Shell (A) and go over the lines that are scribed on the underside of the shell using a Ruler and a Ball Point Pen. Press firmly to form a crease line in the paper so it will fold crisply.



2. Now that you have all the lines traced, fold the Saucer into shape. Using small pieces of masking tape, join the edges of the upper half of the Saucer together.



3. Once you have all the upper half of the Saucer taped together take the Top Plate (B) and insert it into the slots in the Saucer. Make sure you have the center two holes lined up with the holes in the Saucer. (Note: Do not use any glue in this step. The Tabs will hold the plate in place.)

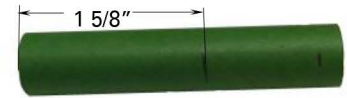


4. Using the built in tabs on the lower half of the Saucer, glue these sections together with the tab on the inside. Hold or clamp the tabs in place until the glue has dried.



MOTOR MOUNT

5. Locate the Motor Tube (C). Make a mark at 1 5/8 inches from the end opposite the slit in the tube.



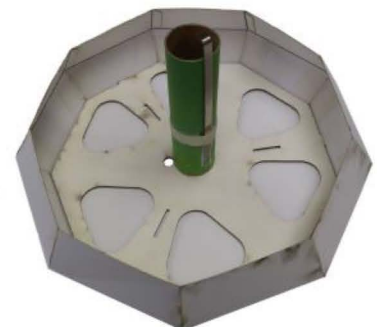
6. Insert the Motor Hook (D) into the slot in the tube. Slide the Hook Retainer (E) over the Hook and Tube until it is even with the mark on the Tube. Smear glue on the edges of the Retainer to hold it in place.



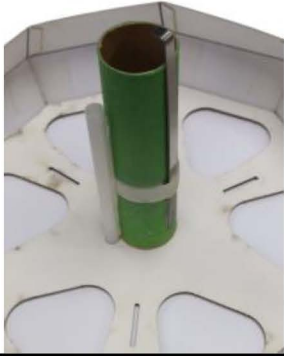
7. Locate the 2 Centering Rings (F). Glue 1 of the Centering Rings inside the Motor Tube against the Motor Hook. Glue the other one onto the Top Plate of the Saucer centered over the large hole in the center as shown.



8. Glue the Motor Tube over the Centering Ring on the Top Plate. Make sure that the Motor Hook is turned away from the Launch Lug hole and is not in line with any of the slots in the Top Plate.

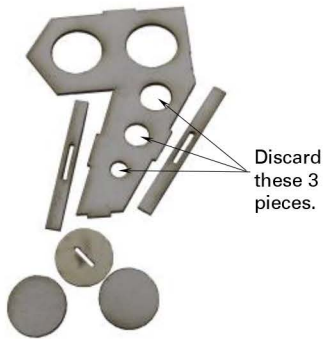


- ❑ **9.** Locate the Launch Lug (G). Run a bead of glue along the length of the Launch Lug and attach it to the side of the Motor Tube with the end in the small hole in the top of the Saucer.



LANDING LEGS

- ❑ **10.** Using a Hobby Knife, carefully remove the parts for one of the Landing Legs (H). (Note: You can discard the three small discs that are in the lower portion of the leg).



- ❑ **11.** Assemble a leg by gluing the side bracing onto the leg first. (Note: The shorter straight piece goes on the inside towards the v-notch). The three discs get glued to the end of the leg starting with the one with the slot, keeping them stacked even with each other. Set aside to dry. Repeat for the other two legs.



- ❑ **12.** Once the Legs are dry, put some glue on the edge with the tab and the edge with the indentation, and glue the Leg to the Top Plate and to the Motor Tube. Make sure the Leg stands straight in line with the Motor Tube and is fully seated in the slot in the Top Plate. Repeat for the other two Legs.



- ❑ **13.** After all of the Legs have been installed, add glue fillets along the Top Plate and the Motor Tube for added Strength. Do the same to the Launch Lug at the Motor Tube.



Glue Fillets

This completes construction of your **JUPITER B**

FINISHING

- ❑ **14.** Finishing your Jupiter B is as simple as a coat of spray paint or the use of some Magic Markers or Stickers. Feel free to customize your Jupiter B as you see fit.

FLIGHT PREPPING

- ❑ **15.** Since your Jupiter B has no Parachute or Streamer for recovery, a motor without an ejection charge is the recommended motor for use in this rocket. If however you do use a motor with an ejection charge, please use the shortest delay possible. This will ensure that the ejection charge has gone off before the Jupiter B has reached the ground. This is for Fire Prevention Safety.

- ❑ **16.** Insert the motor of your choice into the motor tube, nozzle end toward the feet of the rocket.

- ❑ **17.** Prepare the motor as to the instructions that came with your particular brand of motor.

- ❑ **18.** Proceed to the launch pad and place your Jupiter B on the pad using a 1/8 inch launch rod at least 36 inches long.

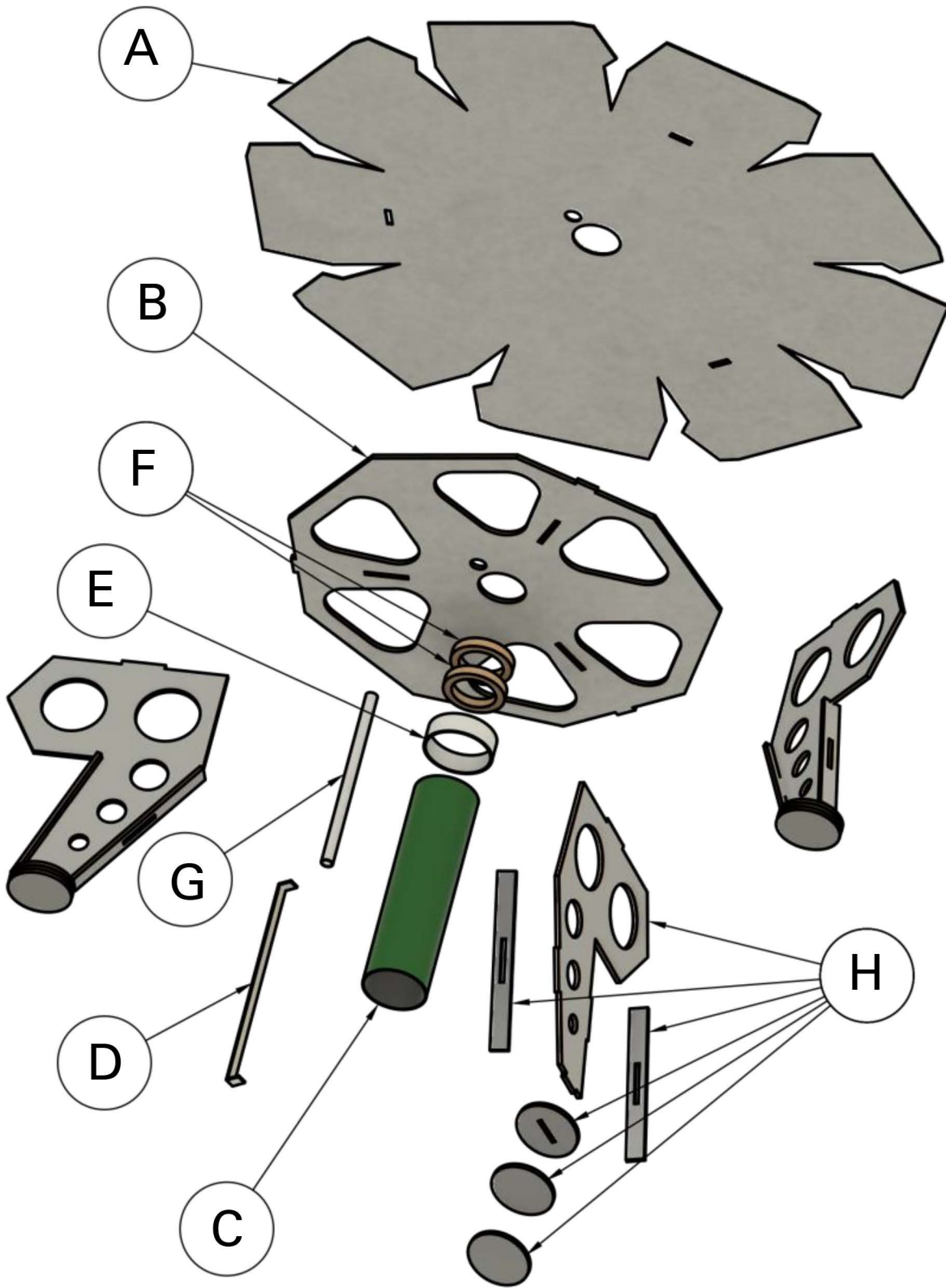
- ❑ **19.** Connect the ignition leads to the starter wires, making sure they are not touching each other or the blast deflector.

- ❑ **20.** Retreat to a safe distance and arm the launch controller.

- ❑ **21.** Alert the Recovery Crew, Assure the Range is clear, Assure the Sky is clear. Perform the countdown.

5-4-3-2-1 Launch!

- ❑ **22.** Recover your Jupiter B and remove the spent motor and dispose of properly. Inspect your rocket for any damage and repair if needed before your next flight.



Parts List

A	Saucer Shell	LS-KN-06
B	Top Plate	CR-KN-06
C	Motor Tube	BT-20J
D	Motor Hook	EH-28
E	Hook Retainer	HR-20
F	Centering Ring (2)	CR-5-20-1/8
G	Launch Lug	LL-122
H	Landing Legs (3)	CR-KN-06

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