



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

Micron™
Kit No. KV-8

Specifications		Engine	Approx. Altitude
Body Diameter	0.736" (1.9 cm)	A8-5	550'
Length	9.2" (23.4 cm)	B6-6	1050'
Fin Span	2.6" (6.7 cm)	C6-7	1650'
Net Weight	0.4 oz. (12.3 g)		

STREAMER RECOVERY

About the Micron™

The Micron was released first in 1963 as an entry -level single stage rocket with streamer recovery. Sharing many design features with the competing Estes Astron Mark II, the Micron was a popular first rocket for beginners. The original had a BC-711 balsa nose cone and later models were migrated to plastic nose cones. The Micron was Centuri #KA-5 and was introduced with a price of $1.25.

The Retro-Repro™ Micron™ is updated by using laser-cut fins. The original balsa nose cone and body tube sizes are used. The streamer is slightly wider than the original to enhance visibility during recovery. The original rubber shock cord is replaced with an elastic cord for longer life. The original method of slitting the body tube to anchor the shock cord has been replaced by a Kevlar® cord for greater reliability.

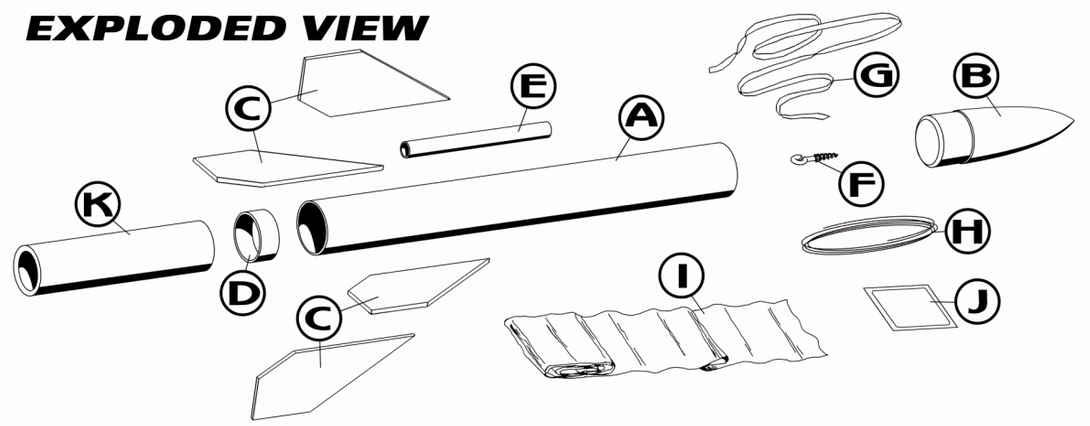
About Centuri Engineering Company

Centuri Engineering Company was started in 1961 by Leroy (Lee) Piester in his garage while he was still in college in Phoenix, Arizona. With his wife, Betty, they built Centuri into one of the largest model rocket companies ever.

Centuri was known for its unusual and innovative designs, producing over 140 different kits with something for every model rocketeer. They also produced model rocket engines and pioneered the modern composite high powered engines with their Enerjet line.

Centuri Engineering was sold to Damon in the late 1960's and shared the same parent corporation with Estes Industries, the largest model rocket company in the world. The Centuri product line was kept separate from the Estes line until 1983. A few of the old kits have been reissued by Estes since then, but for the most part, Centuri Engineering Company lives today only in the dreams of the senior members of the model rocket community.

EXPLODED VIEW



Parts List

A	1	Body Tube	ST-765
B	1	Balsa Nose Cone	BC-718
C	1	Laser-cut Fins	FV-8
D	1	Thrust Ring	TR-7
E	1	Launch Lug	LL-122
F	1	Screw Eye	SE-10
G	1	Elastic Cord	EC-118
H	1	Kevlar® Thread	SCK-24
I	1	Streamer	RS-236
J	1	Tape Disc	TD-1A
K	1	Empty Casing	MC-727
L	1	Decal (Not Shown)	DKV-8

TOOLS

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



October 21,2003 Original Release
September 18, 2011 50th Anniversary

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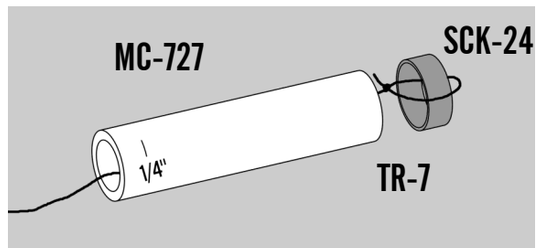
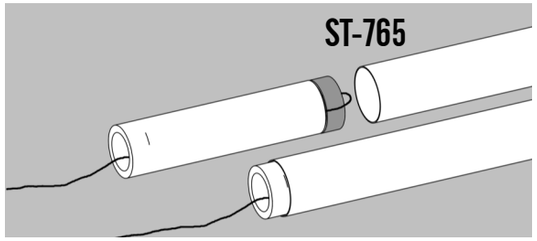
ASSEMBLY

❑ **1.** These instructions are presented in a logical order to help you put your Micron™ together quickly and efficiently. Check off each step as you complete it and we hope you enjoy putting this kit together.

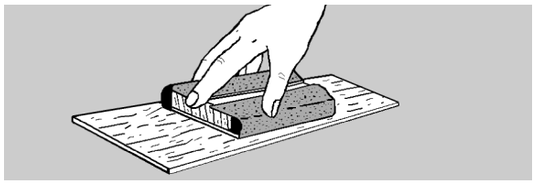
❑ **2.** Tie one end of the yellow Kevlar cord (**SCK-24**) to the thrust ring (**TR-7**). Mark the empty engine casing (**MC-727**) 1/4" from one end. Pull the free end of the Kevlar cord back through the engine casing as shown.



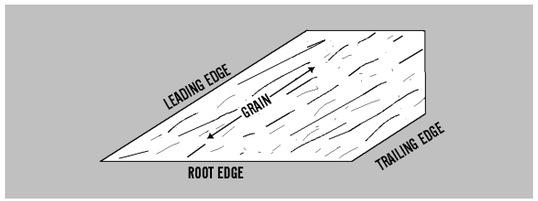
❑ **3.** Put a large dab of glue on your little finger or a cotton-tipped swab and spread the glue around inside the main body tube (**ST-765**) as far as your finger (or swab) will reach, but no farther than 2 1/2". Insert the engine block just inside the end of the body tube. Use the engine casing to push the engine block until the mark on the casing is even with the end of the body tube. **CAUTION: Once you have started to push, do not stop or the ring will "freeze" in place.** Remove the empty case immediately. Push the Kevlar cord back through the tube and out the top.



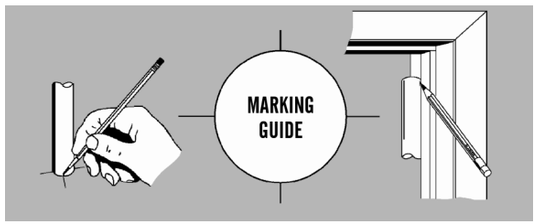
❑ **4.** Lightly sand each side of the laser-cut fin sheet (**FV-8**). Carefully push the laser-cut fins from their sheet. Start at one point on each fin and slowly and gently work around the fin.



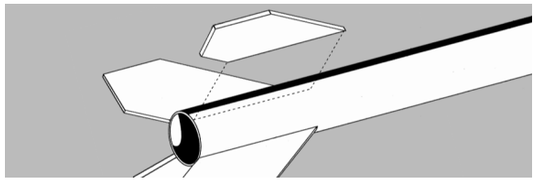
❑ **5.** Round all edges except the root edge. The root edge should remain flat since it will be glued to the body tube.



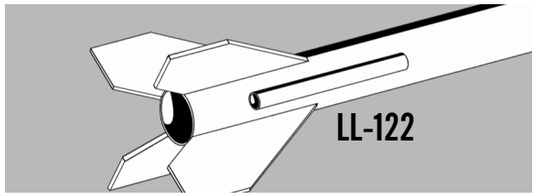
❑ **6.** Stand the body tube on the fin guide below and make the fin position marks on the sides of the tube. Find a convenient channel or groove such as a partially open drawer, a door jamb (as shown,) or a piece of molding. Using the channel, extend the marks the full length of the tube to provide lines for aligning the fins.



❑ **7.** Apply glue to the root edge of a fin and position it along one of the lines drawn on the side of the body tube. Make sure you glue it on the end closest to the thrust ring. Remove, allow to almost dry, apply additional glue, and reposition. Repeat for the other three fins.

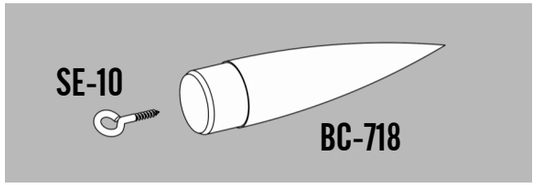


❑ **8.** Glue the launch lug (**LL-122**) onto the body tube, centered between two fins and about 1" from the bottom.

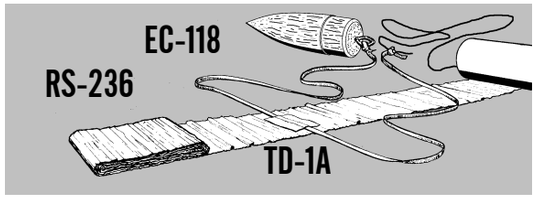


❑ **9.** After the fin assembly is completely dry, run a small bead of glue along both sides of each fin-body tube joint. Using your forefinger, smooth the glue into fillets.

❑ **10.** Turn the screw eye (**SE-10**) into the center of the base of the nose cone (**BC-718**). Unscrew it and squirt glue into the hole. Reinstall the screw into the nose cone. Wipe off any excess glue.

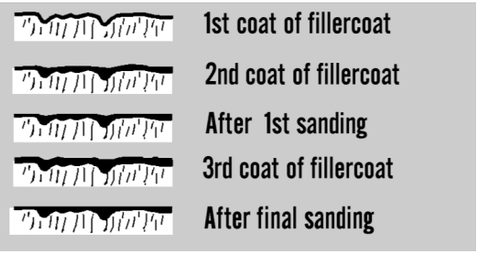


❑ **11.** Tie one end of the elastic cord (**EC-118**) to the free end of the Kevlar cord and the other end to the screw eye. Attach the streamer (**RS-236**) to the center of the elastic cord with the tape disc (**TD-1A**).

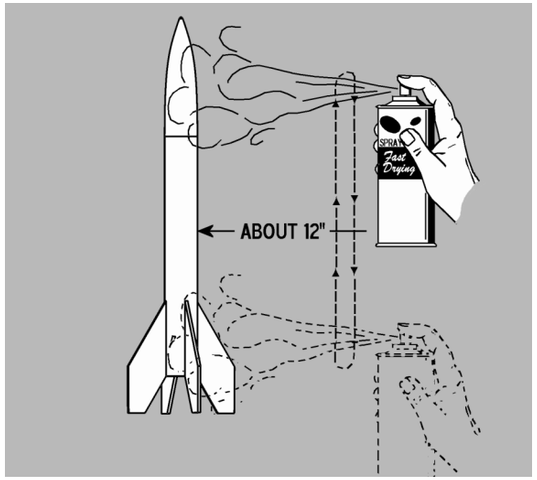


FINISHING

❑ **12.** When the fillets have dried, prepare balsa surfaces for a smooth professional looking finish. Fill the wood grain with balsa fillercoat or sanding sealer, When dry, sand with fine sandpaper. Repeat until smooth.



❑ **13.** After all balsa surfaces have been prepared, wipe off all balsa dust with a dry cloth. First spray the model with an enamel primer. Choose a high visibility color like white for the final color. Spray painting your model with a fast -drying enamel will produce the best results. PATIENCE...is the most important ingredient. Use several thin coats, allowing each coat to completely dry before the next coat. Start each spray a few inches above the model and end a few inches below the model. Keep the can about 12" away and use quick light coats. The final coat can be a little heavier to give the model a glossy wet-looking finish.



❑ **14.** After the paint has dried, decals should be applied. The decals supplied with the Micron™ are waterslide decals. Each decal should be cut separately from the sheet. Think about where you want to apply each decal and check for fit before wetting the decal. Use the cover photo for suggested placement. Dip each decal in a small dish of water that has a drop of detergent. It will take about 30 seconds before the decal is loose enough to apply. Slide the decal in place and use the paper backing to work the bubble out. Repeat for all the decals.

FLIGHT PREPPING

❑ **15.** Mounting the engine: The engine must have masking tape applied to keep it from kicking out of the body tube at ejection time. Don't use too much tape or the engine will be too difficult to remove from the rocket.

❑ **16.** Pack the recovery wadding from the top of the body tube. Use a sufficient quantity to protect the streamer, but not too much that there is no room left.

❑ **17.** Roll the streamer and pack it and the shock cord on top of the recovery wadding. Slide the nose cone into place, making sure it does not pinch the shock cord or streamer.

❑ **18.** Refer to the model rocket engine manufacturer's instructions to complete the engine prepping. Different engines have different igniters and methods of hooking them up to the launch controllers.

❑ **19.** Carefully check all parts of your rocket before each flight as a part of your pre-flight checklist. Launch the Micron™ from a 1/8" diameter by 36" long launch rod.