

.....Welcome to the world of Wildman!

Wildman`s Latest Kit Featuring
New Lightweight Spiral Fiberglass Tubing



Kit Includes:

- 32" Lightweight F/Glass Booster Tube
- Lightweight 5-1 Von Carmen F/Glass Nosecone
- 1/16" Fiberglass Fins
- Birch Plywood Centering Rings
- Kevlar Shock Cord
- 29mm Fiberglass Motor Mount
- 24" Top Flight Nylon Patachute

Specifications:

- Length - 43.5"
- Width - 2.1"
- Weight - 1.25 lbs.
- Motors - E to I

Retail Price - \$89.99 Wildman Club Price - \$89.99

All fiberglass kits constructed of high quality components giving you a long lasting, easy to finish rocket .

This kit contains a [Von Karmen](#) nose cone. Previously unheard of in a kit of this price range.

The Von Karmen style cone is a high performance design usually found in rockets many times the price of this. Just one more leading innovation brought to you by Wildman Rocketry.



The tubing provided in this kit is also a new Wildman innovation. A light weight version of the [spiral](#) wound tubes found in it's bigger brother Wildman series rockets. This new tubing translates into a lighter project yielding higher flights with smaller motors.

This added with Von Karmen NC and the stylish split fin design of the DarkStar and you have one of the finest kits available today. A surefire attention getter at any launch!

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Needed to complete construction:

10 to 30 minute epoxy is recommended . [[If you have experience with 5 minute it may be used, not recommended for beginners due to extremely fast cure time.](#)]

CA [super glue] for tacking parts.

60 to 80 grit sandpaper for roughing up areas to be glued.

100 to 200 for prepping to paint.

Rail buttons or 1/4inch launch lugs.

Motor retention

Small file for notching centering ring [sandpaper or dremel will also work]

Primer and paint.

Popsicle sticks or paint stirrers,for aligning front and rear fins.

Clothespins or small clamps even large paperclips will work, used to align front and rear fins

Ruler and pencil.

1/8in. Drill bit and drill if using rail buttons.

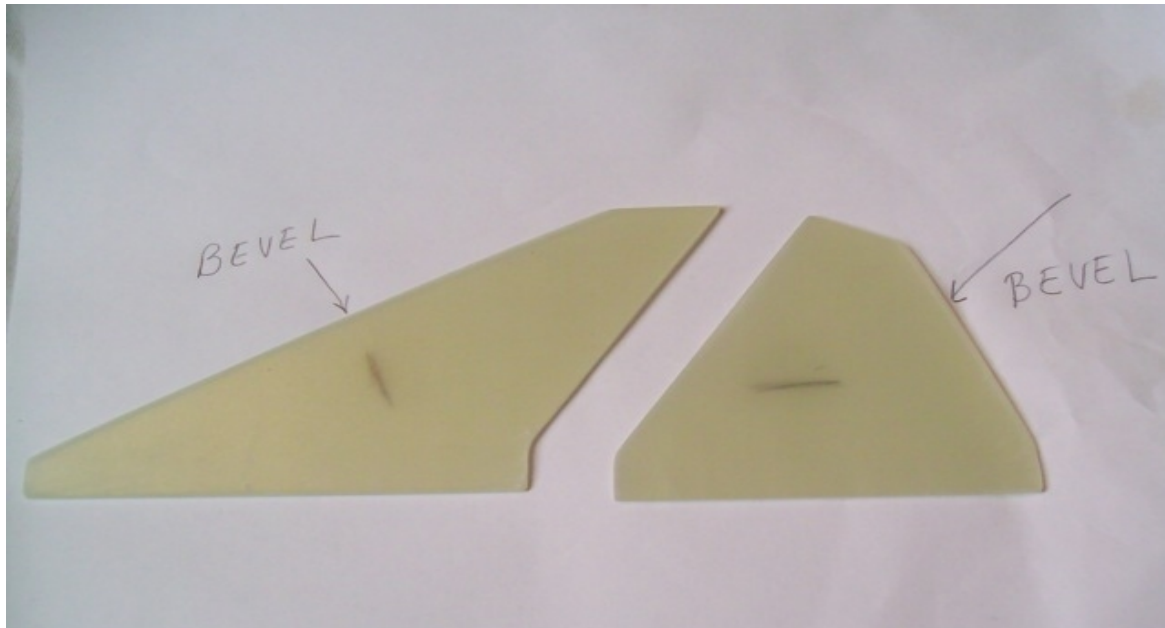
Now read the following instructions thoroughly, then come back and begin! Best viewed in Adobe reader set at 100%.

Pick your favorite flavor!



- Pre slotted 32inch body tube
- 15ft kevlar shock cord
- 24in Topflite parachute
- 10inch 29mm Motor mount [MM]
- Von Karmen nose cone [NC]
- Nose cone bulkplate [BP]
- 3 upper fins
- 3 lower fins
- 4 centering rings [CR]

Abbreviations used in instructions.



Fins do not come airfoiled [beveled], if you wish to do so, bevel or round over the top fin front edge and rear fin trailing edge with sandpaper. All other edges remain squared.



Sand mold mark on NC flush.

Tip: small flat file is much faster and neater than sand paper for this if you have one. Leaves fewer marks on fiberglass finish.



Tube is **marked** where the centering rings will be glued **inside** the airframe. Sand with 60-80 grit all around the circumference of the..... **INTERIOR** of tube to promote glue adhesion.

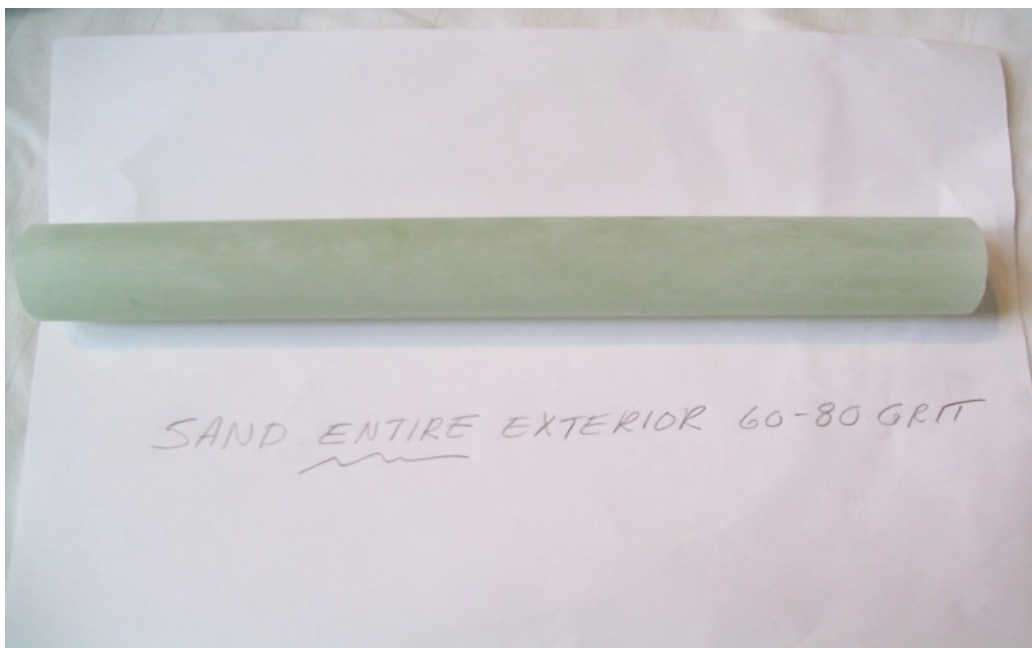


Tip: dowel or stick wrapped with the sandpaper taped on will make reaching inside to sand much easier.

Sand with 60-80 grit **each side of every slot** for fillet adhesion.
1/4 in. from edges of slots.



Sand the exterior of 29mm motor mount with 60-80 grit.



Dry fit parts:

Dry fit centering rings to motor mount and insert into airframe for proper fit. Sand if needed to adjust.

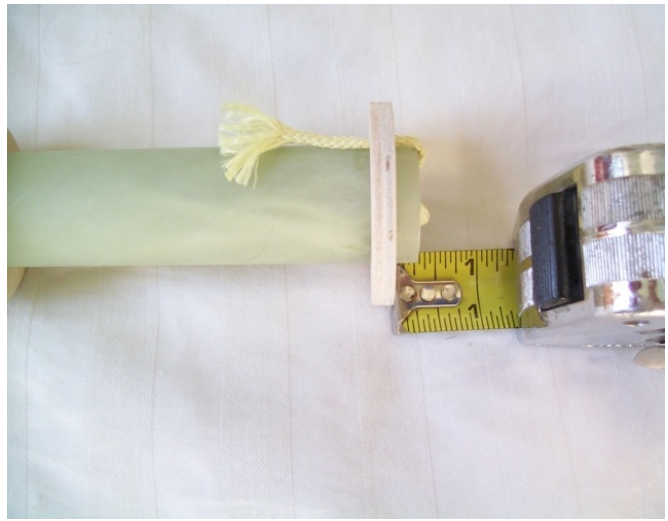
Dry fit fins into slots. Sand slots where needed to fit.

Tip: It helps to lightly sand the root edge sides of fin [**root:** edge that touches motor mount] just enough to “knock” off burrs, insuring a smooth fit into slots without catching. A big plus when gluing.

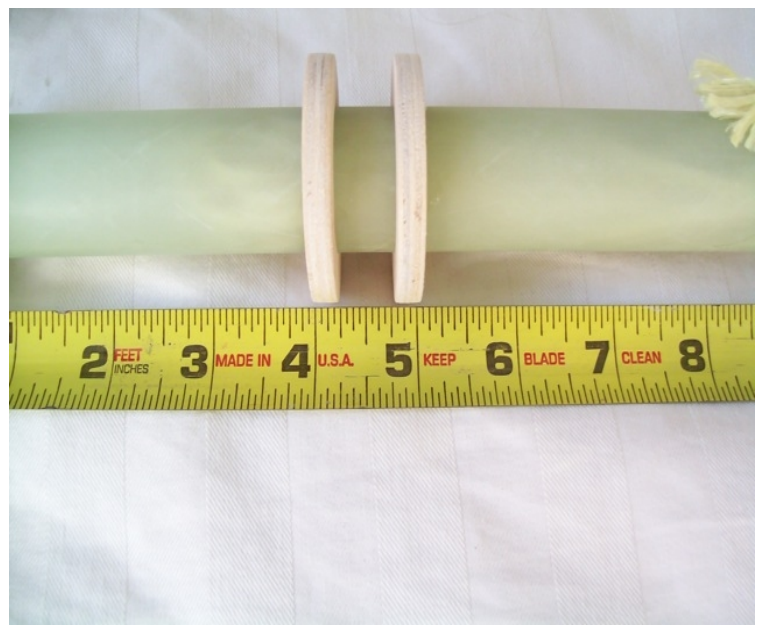
Number the **fins** and the **slots** while your dry fitting them as you go. When it comes time to glue, things will go much faster and smoother this way.



MM assembly: File or sand a small notch in the inside of 1 centering ring . Place kevlar in notch and slip over the top end of motor mount leaving 2in. hanging down. Centering ring should be 1/4in. from top of tube. Stuff remainder of kevlar in MM to keep it out of the way.



Slide remaining 3 CR's [centering rings] on the motor mount tube [MM]. Rear 1/4 from edge of tube. Tack with CA. [superglue]



2nd from the rear 4in. from edge of MM tube. 3rd CR is 4 3/4 in. from rear of MM tube. Tack all CR's into place with CA and

should look like below. **Do NOT EPOXY yet !**



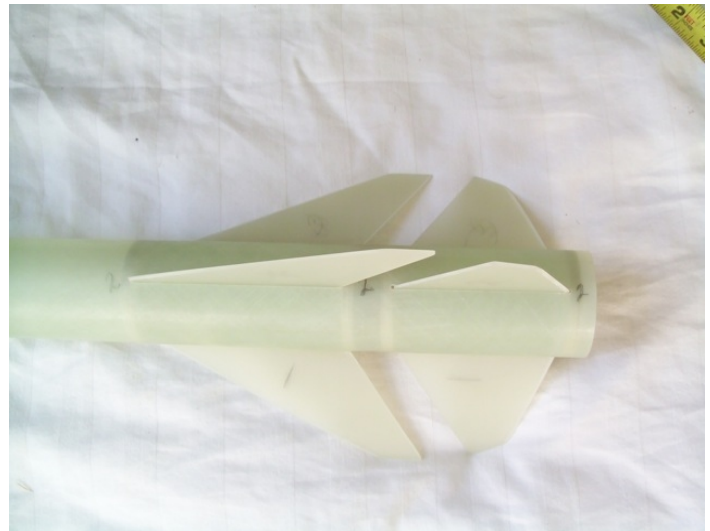
Place upper fin in position between CR's and check for fit all around the MM. Do same for lower fin position. If need be reposition CR's so fins fit between them. Remove fins.



Slide MM assembly into position in the airframe. Make sure the kevlar shock cord is positioned **BETWEEN** the fin slots. The edges of all CR's should barely be visible at the ends of slots.



Now dry fit all the numbered fins into their corresponding slots to check on final fit.



All should fit correctly at this point. If not make adjustments. When satisfied with dry fit, remove fins and MM from airframe. Now ready to epoxy the CR's into place. **Add motor retention if using at this point , then continue.**

Mix some epoxy. Lift Kevlar and apply epoxy under it on tube. Push Kevlar into epoxy and put some more on top [encapsulate it]. Fillet top of centering ring with epoxy all the way around. [Fillet : bead of epoxy on a joint. Think caulking tile to bathtub]



After filleting **top of top CR ONLY**, do **NOT** fillet **bottom of top CR** or fins won't fit between, then fillet **inside of middle CR's** only, and the **outside** if the rear CR. Remember **NOT TO FILLET CR'S WHERE THE FINS WILL BE!**



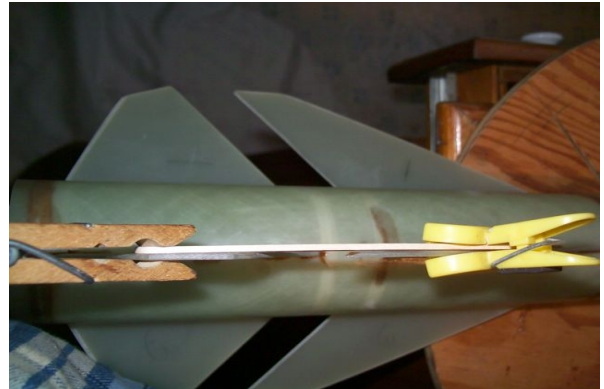
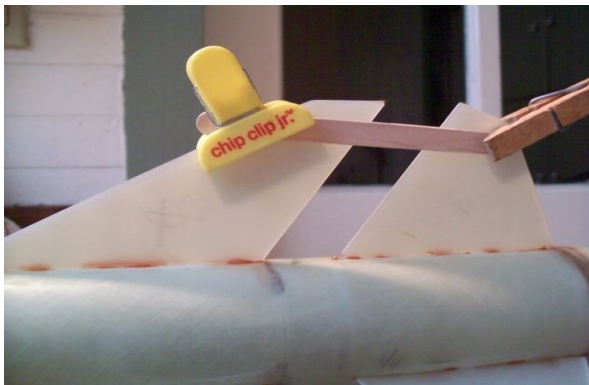
NO epoxy between CR's where fins go, as shown in photo below ! Set aside to cure.



Insert MM assembly into airframe, **take care to have kevlar shock cord BETWEEN fin slots!** Sand both sides of all fins, from root edge up 3/4in. with 60-80grit, to promote fillet adhesion. Mix a small batch of epoxy to tack fins. Scoop up some with edge of mixing stick and "butter" [small bead] root edge of rear fin. Try to keep it off the sides of fin as much as possible. Insert into airframe. Make sure fin is pressed tight to MM tube. **Also make sure not to insert fin upside down.**



Tack remaining 2 fins. Align fins to insure straight flight. If experienced you may continue and tack upper fins and align. For those new to building split fin designs, let the rear set cure, then do the following:



Use a popsicle stick or similar item and clothes pin, chip clip, clamp, etc, to hold upper fin in alignment with rear, after putting small bead of epoxy on root edge and inserting into airframe. Do remaining 2 fins. Stand tube on end and let cure.

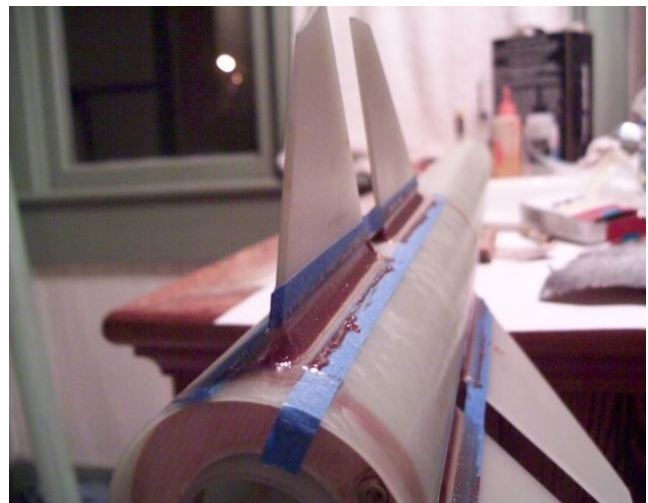
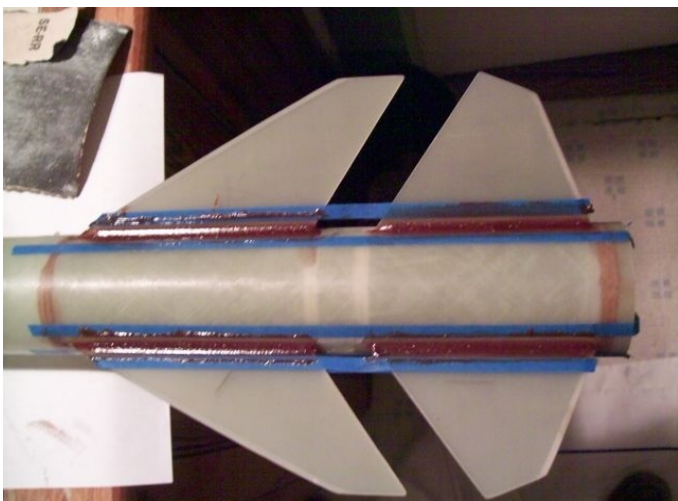
When epoxy ages, the hardener darkens up, hence the reddish color. Actually makes seeing it in the pictures better. No ill effect on strength.

External fillets: as simple as mixing enough epoxy to do 2 at a time and pulling them out with a mixing stick, or your finger.

[covered with a nitrile glove for safety]

First place airframe in rocket rack or hang fins over end of table. Making sure airframe is level.

Or you can also tape the fins and airframe to save clean up and sanding when cured.

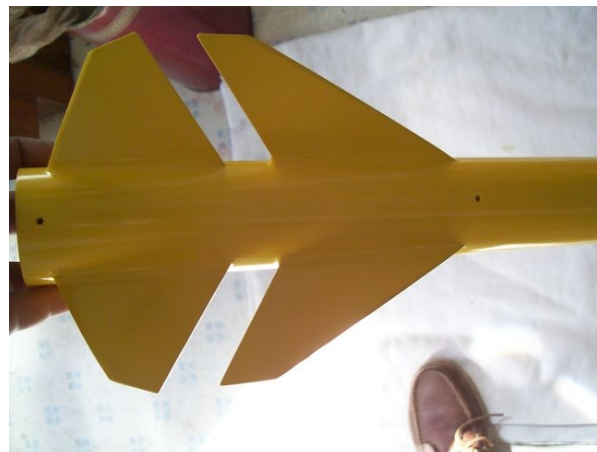


A thickener such as West 406 [available from Wildman] may be added if you wish to do all fillets at same time. Prevents sagging, runs and drips, when added to epoxy, making the consistency that of peanut butter.

Removing tape after partial cure is much easier than waiting for full hardness and reduces sanding. Finished fillets after removing tape. A little sanding and ready for primer and paint.



Drill 1/8 holes for rail guides. Try to hit bottom and top centering ring when mounting. **This should be done before painting**, so you can see the CR's through the glass. [I forgot to take pic, before I painted.]





Cut 12 inches off Kevlar to make loop for NC.



Tie overhand knot, insert loop through hole in NC bulkplate





Install assembly into nose cone and epoxy into place. Sand bulkplate if needed, to fit into nose cone



Tie shock cord to nose cone. Attach parachute to shockcord 2ft distance from nose cone.

.....CONGRATULATIONS your finished!.....

Take the Wildman Oath and stand back to admire your rocket.

.....THE WILDMAN OATH.....

UPON COMPLETION OF THIS ROCKET AT THE FIRST FULL MOON YOU MUST:
PLACE YOUR WILDMAN OUTSIDE IN THE MOON LIGHT AND CRISN IT WITH A
BEER OR A SHOT.[OR SODA POP IF YOUR UNDER AGE] REPEAT THE FOLLOWING
WORDS WITH PRIDE AND DIGNITY, WHILE WATCHING THE MOONBEAMS
DANCE ON YOUR FINS.

THIS IS MY WILDMAN ROCKET. THERE IS NO OTHER LIKE IT. I HAVE BUILT
THIS ROCKET, AND PART OF ME LEAVES THE EARTH EVERY TIME IT FLIES.
OTHERS MAY POSSES ONE, BUT NONE ARE LIKE THIS ONE; IT WILL FLY
HIGHER AND FASTER THAN ANY OTHER.

I HAVE MET THIS CHALLENGE, BUILT THIS ROCKET, I AM NOW ONE OF THE
ELITE FEW. I WILL WALK TO THE PADS WITH MY HEAD HELD HIGH, A NEW
SPIRIT IN MY STEP, CONVICTION IN MY HEART.

IF I SEE ANOTHER WILDMAN BROTHER, I WILL TREAT HIM WITH RESPECT.
I WILL BE COMPELLED TO GREET HIM WITH THOSE HOLY WORDS,
PASSED DOWN THROUGH TIME, TEMPERED FROM THE SPARKS
AND FIRE OF COUNTLESS SKIDMARK MOTORS .

UTTERED AT THE HOLIEST OF EVENTS BY OUR FEARLESS LEADER
THE WILDMAN HIMSELF.

..... “WANNA DRAG RACE IT?”.....

I WILL ALWAYS STRIVE TO STUFF THE LARGEST MOTOR THAT I CAN IN THE
PIPE. I WILL FLY WITH OUT FEAR. NEVER REFUSE THE CHALLENGE.
I WILL DANCE WITH DELIGHT AT THE OPPORTUNITY TO DRAG RACE MULTIPLE
WILDMAN BROTHERS AT ALL EVENTS.

I SHALL NOT FRET OVER WHAT OTHERS MAY THINK, I AM A WILDMAN
I AM FREE FROM THE FEARS OF SCRATCHED PAINT, DIRTY FINS, ROAD RASH
ON AIRFRAMES, CATCHY PHRASES AND FUNNY NAMED ROCKETS .

NOW I AM A WILDMAN

I HAVE MY WILDMAN ROCKET, I WILL“ JUST FLY IT”

ALTIMETER OR CAVEMAN STYLE ...IT MATTERS NOT, “JUST FLY IT”

NAKED OR PAINTED.....“JUST FLY IT.”

MY FLYING SPIRIT HAS NOW BEEN FREED .

..... “SEMPER FLY”



