

How to Make an SCA Rattan Sword

Here is a step-by-step process to make a legal SCA rattan sword. If you follow this process you will end up with a functional SCA rattan sword that meets marshal's requirements. There are many tips and tricks to make a sword and other people are going to disagree with my method. Listen to their ideas and consider mine. They are right, and so am I.

Step 1 – Pick a Piece of Rattan: Take a sword-length piece of rattan and check to make sure it is at least 1 ¼" in diameter. Proper length depends on your personal preferences. A good general rule is the sword tip should touch the floor right in front of your toes if you stand straight up and hold the sword in your relaxed arm hanging at your side. Adjust the length from there based on sword weight, sword balance, and fighting style. If you are not sure, start with a longer sword and cut it down from there as you get used to what you prefer. Hold it in your hand a few different ways until you find which end of it feels better weight-wise. Also look at the two cut ends of the rattan. The more porous end will be lighter but also weaker, meaning it will break (or "broom") faster. Consider using the more porous end as the handle.



Step 2 – Make the Handle: Slide your basket hilt onto the handle end of your rattan and use a marker to designate where your hand grip will be, centered inside the basket hilt. Also mark the top so you do not lose track of which side is up.



Using a saw cut into the sides of the rattan at each end of the grip, where you marked its boundaries. Then use a draw knife to trim down the rattan to form the grip. The cuts form a natural stopping point for the draw knife. Use the draw knife in each direction to roughly shape your handle. Check the grip often to see how it feels. You may find the top becomes the bottom as you shape the handle. Just carve away a little at a time and keep checking the feel of it until you like it. Use how a carpenter's hammer feels in your hand as a basic guideline to follow. Once you have the handle roughly shaped use a sander to further refine it. Again, sand it down a little at a time and keep checking the feel of it until you like it.

Step 3 – Add a Trigger (Optional): If you want to use a trigger (rather than a lanyard) now is the time to construct it. I like to have my ring finger in the trigger and my middle and pointer fingers wrapped over the trigger. To facilitate this I measure out a folded strip of leather so that my ring finger sits comfortably and snugly in the trigger with my hand firmly in the middle of the grip. Anchor the trigger above the grip using a screw. Apply a dab of wood glue to the screw threads before you sink it, to better hold the screw in place and reinforce the rattan. Now is also a great time to wrap the handle with friction tape, if you want to. Another option is to be an idiot like me and forget to wrap the handle until after you attach with basket hilt, which makes it harder. It's entirely up to you.





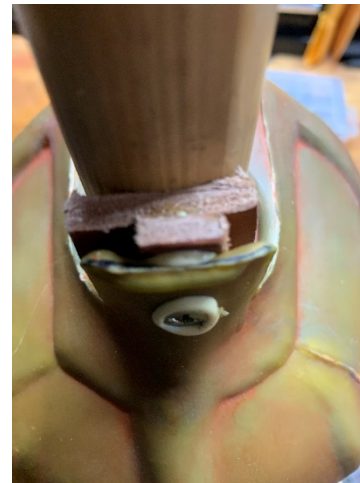
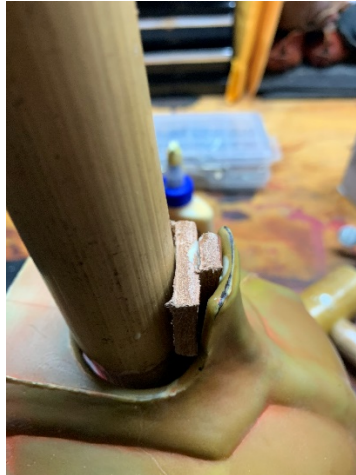
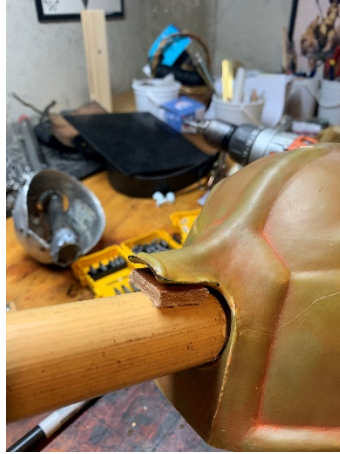
Step 4 – Attach the Basket Hilt: Align the basket hilt with the top of your sword, making sure it is in line with your handle. The trigger attachment point is probably going to be under the attachment point at the front of your basket, which is fine. Attach the back of the basket hilt first. Line it up with the end of the rattan. I attach the basket hilt to the rattan using wood screws reinforced with a dab of wood glue. I drill a pilot hole through the hilt into the rattan using a drill bit of a smaller diameter than the wood screw. I want the wood screw to penetrate no more than halfway through the rattan (half the diameter) so it is firmly attached but not so much that you drill all the way through the rattan.





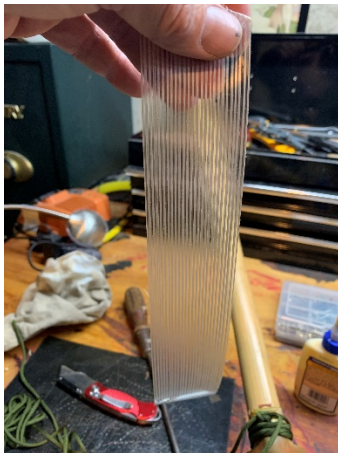
Attach the front of the basket hilt next. I use a wood screw, but if you worry it will make a weak point at the point between the hilt and the blade you can lash it in place instead. I show both techniques in the accompanying photos. If there is a gap between the basket hilt attachment point and the rattan you need to shim it. I shim using pieces of thick leather. I apply a little wood glue to the shims to hold them in place and use a hammer to tap the shims in place if needed. I also sometimes use a flathead screwdriver to make minor adjustments I cannot do with my fingers. If you are using a screw to attach the front of the basket hilt drill a pilot hole as before and make sure it goes through the hilt, shim(s) and into the rattan. If you use a screw apply some wood glue and sink it half the diameter of the rattan or less.





If you decide to use lashing instead of a screw two good options are 550 cord (AKA parachute cord) or twisted strapping tape. Do as many wraps as you want, holding them in place with a round turn (half of a square knot) and finish it with a square knot. Make the lashing as tight and uniform as you can, so it will not loosen. If you use strapping tape, take a strip of it and twist it

sticky side out into a string. Sticky side out will hold it in place better, but does make it harder to cinch tight.



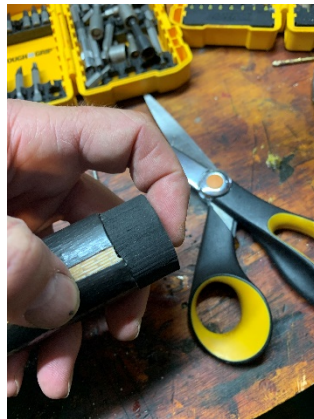
Step 5 – Tape the Blade: The rules require that the rattan be covered by tape and duct tape does not last very long when you hit things with it. I apply one strip of strapping tape to each edge of the sword (the striking surfaces). I use strapping tape that has threads going through it in both directions for added strength, but normal strapping tape is fine. Resist the urge to over-tape your sword. All tape adds weight and there is no reason to have an overly heavy sword. Do not wrap the tape around the blade like the friction tape for the handle. Use long strips along the length of the blade instead. Apply the strapping tape to the edges, but not to the flat sides of the sword. There is no reason to reinforce the flat sides because you won't be hitting with the flat of your sword.

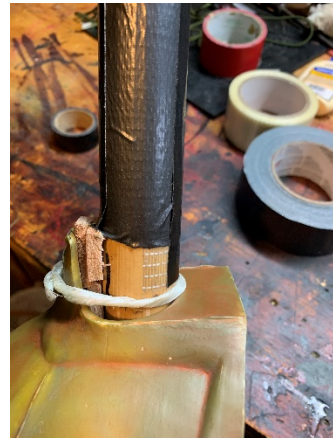
Now apply the primary color tape for your sword. Apply one long strip along each flat side of the blade. The flat sides are the sides that are not the cutting edges. There will be a gap between the tape along the top and bottom edge, so you will still be able to see the strapping

tape there. I use silver duct tape because it looks like steel or iron, but you can use whatever color you like.

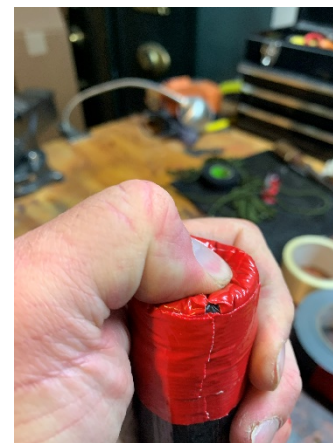


Step 6 – Add the Thrusting Tip (Optional): If you want to add a thrusting tip, do so now. If not, skip this part and just cap the end of your sword with a piece of your primary color duct tape. You want the end of the sword to be cut at a right angle to the blade. Apply a piece of dense but malleable closed-cell foam to the tip and cap it with a piece of your primary color duct tape. You can glue the foam to the tip if you want, but it is not necessary. Wrap a piece of strapping tape around the side of the thrusting tip and the tip of the rattan to reduce the chance of the tip being sheared off. You need to indicate the striking surfaces of your sword using tape that contrasts to your primary duct tape color. I use black, but again you can use whatever you want as long as it contrasts with the primary color. Run one long strip of contrasting duct tape (or electrician tape) along the top cutting edge, over the thrusting tip, and down the bottom cutting edge. Between the primary color duct tape along each flat side and the contrasting color along the cutting edges you have now entirely covered the blade with duct tape. Make your lines as straight as you can, but do not be overly concerned about it. Your blade is going to look like it got run over by a lawn mower after a few practices.

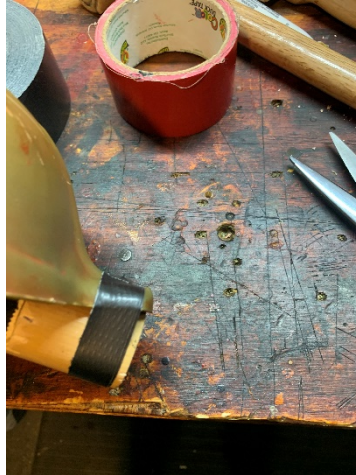




Step 7 – Marking the Thrusting Tip: If you added a thrusting tip you must indicate it with another contrasting color tape. I use red, but use whatever you want. Apply two short strips of the tape crisscrossed over the tip and then add a wrap around the base of the tip. That wrap should be extra tight to better hold the tip in place and to stiffen up the edges of the tip a bit. The wrap of this contrasting tape will cover the strapping tape you used to initially affix the tip. Thrusting tips have a habit of being torn off in fights, so it is okay to compress them a little when applying tape, so long as they can still give a little when pushed upon. If you can compress it a half inch with your thumb it is fine.



Step 8 – Finishing Touches: You can add small strips of tape to cover the screws and/or lashings holding the basket hilt in place if you want. This is more important if you use lashings and less important if you use screws. One wrap of tape is plenty.



Final Notes:

- If you prefer a lanyard to a trigger tie a fixed loop in the end of a length of 550 cord. Run the tail (the other end) of the cord through that fixed loop so you have made an adjustable loop similar to a noose. Tie the end of the cord to the handle using several wraps to add friction so it will not slide up and down the handle (wraps add friction). Place your hand through the adjustable loop and cinch it tight. You may need to play with the length of the cord a bit to find what you like.
- There are several basket hilt options. I prefer plastic, but you can get aluminum or steel, including some made of steel heavy gauge wire. Pick one you like that gives you the weight and balance you prefer. Make sure your hand fits inside it. If it is too small you will rub your knuckles raw.
- Some people recommend using hose clamps to hold your basket hilt in place. That works, but I find they need constant tightening.
- You can also make a sword without a basket hilt. You can buy various types of cross guards, tsubas, and pommels if you prefer. Cross guards and pommels can be screwed in place. Tsubas can be held in place by wrapping tape on either side of it along the rattan to hold it in place. If you choose not to use a basket hilt you need to fight wearing full gauntlets instead of demi-gauntlets.
- Other than shaping the handle the way I make swords does not include shaving down the rattan. Some people will shape the blade so the flat sides are actually flat or otherwise adjust the shape of the blade. You can also get rattan that is entirely shaved down and has no outer skin. Shaping the blade can make it look better and reduce weight. Using a fully shaved stave gives you a very light, fast sword. Remember that the outer skin of the rattan provides a lot of the strength and resiliency though, so if you remove it you are weakening the rattan and it will break sooner. If you choose to shave down your sword double check that it is still at least 1 ¼ inch in diameter after. You can

add tape to thicken it if needed, but layers of tape make it softer which takes away power from blows.

- Some people place their rattan in a warm dry place for a while (months) to dry it out and make it lighter. Consider doing that if your rattan piece is too heavy.
- Periodically you will need to re-tape your sword. Re-tape it whenever bare rattan is exposed. You can do spot corrections or can tear off all the old tape and re-tape the whole sword. I usually re-tape the whole blade.
- I find that the “sweet spot” on my blade gets beat up faster than the rest of the rattan. The “sweet spot” is the spot you hit with most often. The “sweet spot” for me is about 12 inches down from the tip. Consider adding an extra strip of strapping tape (maybe 6-8 inches) to the “sweet spot” to make it more resilient. I did not include this in the initial construction because it may take a few practices to determine the “sweet spot” for each sword you make.
- Eventually your sword will break. On rare occasions it might actually break in half, but usually they just “broom.” Broom means the fibers separate in the rattan and start to resemble the brush end of a broom. Feel along the length of your sword occasionally to check for brooming as it might be hidden by the tape. If a portion is soft, it has broomed and you should make a new sword.

Have fun!

- Vindiorix “Black Finn” Ordovix (MKA Justin Davis)