

## BASIC SWORD CONSTRUCTION

---

### Materials:

Camping mat	electrical tape	spray adhesive
1/2" fiberglass poles (tent poles)	gray or black cloth	soft (open) cell foam
contact cement	scissors	plywood or leather washer
duct tape	utility knife	

**Step 1:** Take two poles and duct tape together (Fig. 1)

**Step 2:** Cut camping mat to shape (Fig. 2). The minimum length for a sword blade is 16"; max length is 36". The blade is measured from the top of the cross guard to the tip. Leave about 1" at the bottom of the blade for the cross guard. The pommel of the sword must be a min. of 2" dia. When cutting the mat, make the handle a little wider than you want it, the mat will compress when you tape it. Repeat step 2 twice more.

**Step 3:** cut poles to length (if using tent poles, they'll probably be short as you'll want them). The poles should be 1/2" shorter than the entire sword length.

**Step 4:** Cut one of the sword blades in half down the length (Fig. 3). These will be placed on either side of the poles.

**Step 5:** Using contact cement, glue the poles down the center of one sword blade (Fig. 4). Leave 1/2" gap at the bottom.

### Let Dry

**Step 6:** Glue the piece that was cut in half to either side of the poles (fig. 5). Make sure to get glue on the sides of both mat and poles. Place a board weighted down with something heavy across the entire length of the sword and let dry.

**Step 7:** When the first two layers are dry (give them about 1/2 hour) glue the top layer on and leave to dry as in step 6. When dry, trim the middle layer evenly with rest of sword.

**Step 8:** Cross guard. To make a simple cross guard cut a strip of mat a minimum of 1" wide and wrap around the blade above the handle (Fig. 6). Glue, let dry and repeat. You can get creative at this point and make a fancier cross guard, but be warned that they tear easily. A sword with a broken cross guard will be removed from play.

**Step 9:** Wrap the cross guard in duct tape. Try to be neat, trim any excess so there are no sharp edges, duct tape can cut! Next wrap the handle with electrical tape. It's best to wrap the handle with short pieces of tape. The first piece in one direction and the second in the opposite, etc. (Fig. 7). If you wrap the handle with one piece it will twist and your pommel will be out of line. It will still work, but it will look like crap!

**Step 10:** Cut a piece of mat to fit across the tip of the sword and pommel and glue (Fig. 8). Weight entire sword blade down as in step 6 and let dry completely over night.

**Step 11:** Cut a piece of soft cell foam the size of the pommel and glue onto the pommel.

**Step 12:** Cover. The blade and pommel must be covered in black or gray cloth (brown can be used if you making a club). The blade cover must be sewn to size and slipped on. You may not simply duct tape the cover onto the blade, if you do your weapon will not pass inspection. If you can't sew find someone who can! Socks are also not a legal cover. Tape the cover at the base of the blade tightly with electrical tape.

## ADVANCED SWORD CONSTRUCTION: STAB TIPS

---

I recommend trying your hand at making and fighting with a few non-stab tip swords before moving on a to stab tips

**Step 1:** Tape poles together.

**Step 2:** Cut mat to shape. It will need to be min of 4" wide and you'll need 5 layers of mat rather than three. Cut one layer in half down the length and cut out the handle of two.

**Step 3:** Glue poles down center of one blade piece (Fig. S1). Glue two layers together. Let dry.

**Step 4:** Glue middle layer (piece cut in half). Let dry.

**Step 5:** Glue outer layers on. At this stage glue the two pommel pieces also (Fig. S2)

**Step 6:** You will need a thin piece of wood, 1/8 inch thick, or a piece of 5-6 oz. leather for a washer. Cut the washer so that it is about 1/2 inch from each edge of the sword tip and glue (Fig. S3).

**Step 7:** Cut a piece of mat the same size as your tip and pommel and glue (Fig. S4).

**Step 8:** Cut a cube of soft cell foam the same area as the tip of the sword (Fig. S5). Glue it to the tip using a spray adhesive; contact cement is absorbed by soft cell foam and will not make a good bond, as well as hardening the foam. After affixing the tip, place a strip of duct tape across it and the flats of the blade, this is to hold the tip on while it dries (Fig. S6).

**Step 9:** Cut a piece of soft cell foam the size of the pommel and glue onto the pommel.

**Step 10:** Cross guard and cover. Make a cross guard as normal. Leave the foam at the tip of the sword square, if you want it to be pointed, sew the cover with a point and the foam will compress to the desired shape (Fig. S7).

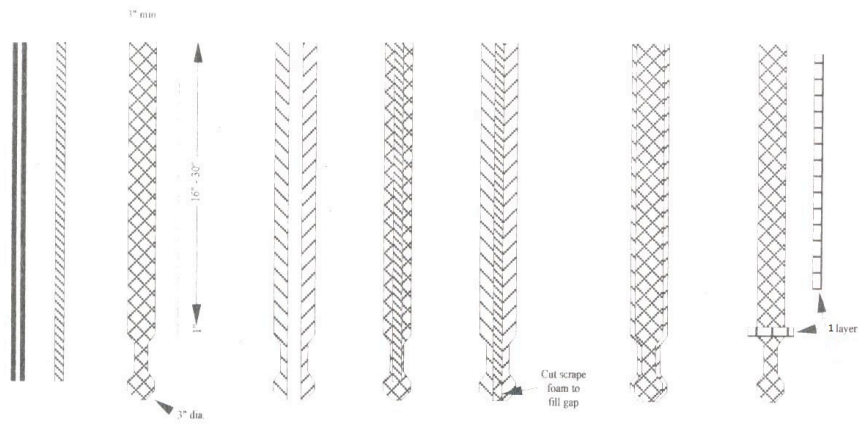


FIG. 1 Tape Poles Together  
 FIG. 2 Cut 3  
 FIG. 3 Cut 1 Layer in 1/2  
 FIG. 4 Glue poles at center  
 FIG. 5 Glue two middle pieces  
 FIG. 5a Glue third piece on too Trim down.  
 FIG. 6 Glue 1"-2" strip around the hilt

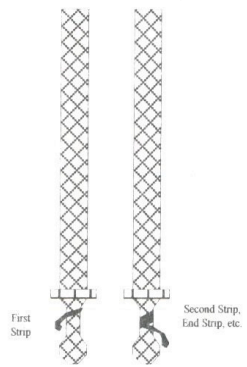


FIG. 7

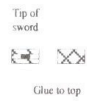


FIG. 8

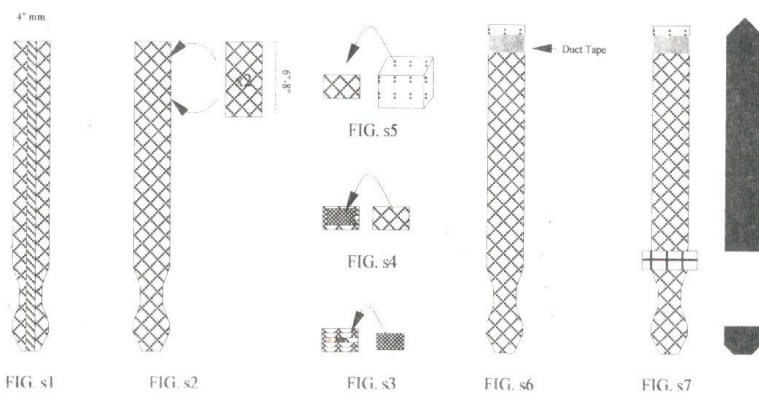


FIG. s1 FIG. s2 FIG. s3 FIG. s4 FIG. s5 FIG. s6 FIG. s7

Don't forget to cover the pommel!

NOTE: Drawing not to scale!

