

# 1 Division 1 sword construction

This technique for constructing a sword is not the only way to make an Atlantian legal division one sword. This technique will produce a weapon that will conform to the Atlantian division 1 Youth Armored Combat regulations.

## 1.1 Materials

Golf tube

Strapping tape

Duct tape, minimum 2 different colors.

Pipe insulation

½ inch thick closed cell foam

Hockey grip tape (optional)

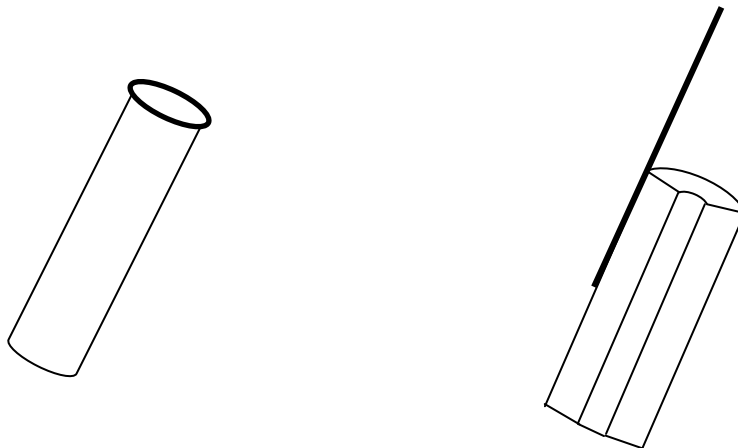
Electrical tape in a different color than either of the 2 duct tape colors (optional)

## 1.2 Cut to length

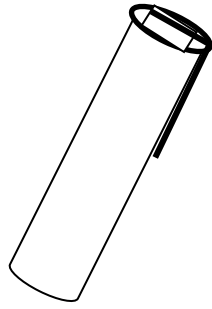
The golf tube will have a reinforced ring at one end. This must not be used for the tip of the sword. Use this for the handle side of the sword. Have the child grasp the golf tube by the end with the reinforced ring. Trim the length with scissors to be appropriate for the height of the child. Typically this will be so that the golf tube while held by the child will just touch the floor or ground when pointing the tube down. Keep in mind that the weapon when completed will be 2.5 inches longer than that because of the thrusting tip.

## 1.3 Fill the handle

Cut some foam pipe insulation approximately 2 inches by 7 inches. Adjust with width as needed so that when compressed it can be inserted into the handle side of the golf tube. Put a strip of strapping tape on the piece of foam long enough to extend over the top and down the side at least an inch.



Insert the foam with the tape into the handle side of the golf tube then wrap the tape over end securing the end of the foam to the tube so that it can't travel down the tube.

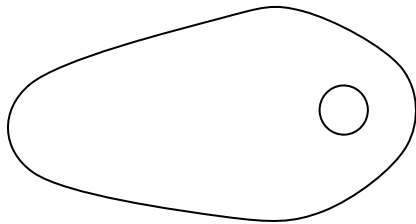


#### ***1.4 Wrap entire golf tube in strapping tape.***

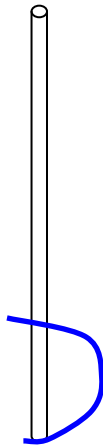
Take long strips of strapping tape and cover the golf tube with strapping tape. Be sure and cover both the tip end and the handle end. There should be no visible plastic. Use strips of tape going length wise up and down the tube. Do not spiral wrap the strapping tape. At this point you can optionally tape the handle with hockey grip tape or some other tape where the child will be holding the weapon.

#### ***1.5 Make a foam basket***

Make a foam basket hilt out of closed cell foam and attach it to the tube with strapping tape.



Slide the golf tube through the hole and attach the narrow end of the foam to the end of the golf tube with tape. Secure the foam to the golf tube with tape so that it does not move or slide.



## **1.6 Cover sword in foam pipe insulation**

Slide a piece of foam pipe insulation over the golf tube. There is a seam in the pipe insulation that will separate and leave a gap. Slide the foam down all the way to the basket hilt made in the previous step. Allow 2.5 inches past the tip of the golf tube for a thrusting tip and trim the foam with scissors. Take another piece of foam pipe insulation and cut a length wise strip to fill in the gap from the seam in the piece of foam on the golf tube. It does not have to be one continuous strip. As you make the strip for the section past the end of the golf tube cut the strip in an increasing width to make a slight wedge. This will increase the diameter at the tip to meet the 2.5 inch diameter requirement for the thrusting tip. Secure the foam to the sword with tape. Secure the strip of foam in between the seam edges of the main foam piece with tape. Do not use excessive tape at this point as the increased weight and rigidity caused by multiple layers of tape might cause the weapon to fail an inspection. Multiple layers of tape are OK at the handle where you are securing the foam to the sword. Use either duct tape or strapping tape.

There should now be a gap at the tip where the cylinder of foam extending beyond the tip of the golf tube is hollow. Because there is strapping tape cover the opening in the golf tube small pieces of foam can be torn or cut and inserted into the tip to fill it with foam. The pieces will not go into the covered end of the golf tube. Try to make the tip as flat as possible. Do not pack the tip or pre-compress the foam. Fill it loosely and secure the end with a little tape. Use duct tape or strapping tape it does not matter at this point.

## **1.7 Cover sword in duct tape**

Cover the blade of the sword and the basket hilt with duct tape. Since you know that you'll have to put a contrasting color duct tape on the edges of the blade you can leave a gap there to cut down on how much of the blade will end up with two layers of duct tape. Make long strips of tape and tape the blade lengthwise. Do not spiral wrap the blade or tape the sword in any way that compresses the foam. Take a strip of duct tape in a contrasting color and tear it in half lengthwise. Use these strips to mark the edges of the blade. Mark the thrusting tip in the contrasting color tape too. Take a piece of electrical tape or a strip of duct tape split in half and wrap a stripe of a contrasting color around the middle of the sword. The contrasting color can be the same color as the contrasting color used to mark the edge and thrusting tip or it can be a different color.

