

# Attaching Cloth Arms and Legs

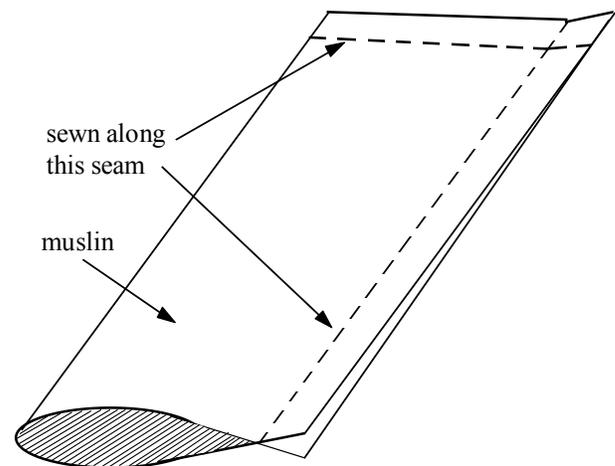
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Buy a good quality muslin from a fabric store. Take a cloth tape measure and find out what the diameter of the wrist is of on the hand casting. Take the measurement at the end of the casting where the cloth will be attached. Take this measurement and add 1 1/2 inches (this is 1 inch for seam allowance and 1/2 inch for ease of installing). This is how wide you need to cut the muslin cloth. Do the same for the feet (at the ankle opening) if you have cast feet.

For the arms, the length for the muslin needs to be such that when all is said and done, the finger tips of the hands hang down to the seat of the body or just slightly past. It is suggested that for your first figure, cut the muslin longer than what is needed. You can cut some off, just before you attach the arms to the body. Some figure makers like arms that are longer than this and some like the arms about the same length as the body (as described above). Edgar Bergen's figures, Paul Winchell's figures, and other's figures have short arms like this. It looks fine on a vent figure and is less obtrusive.

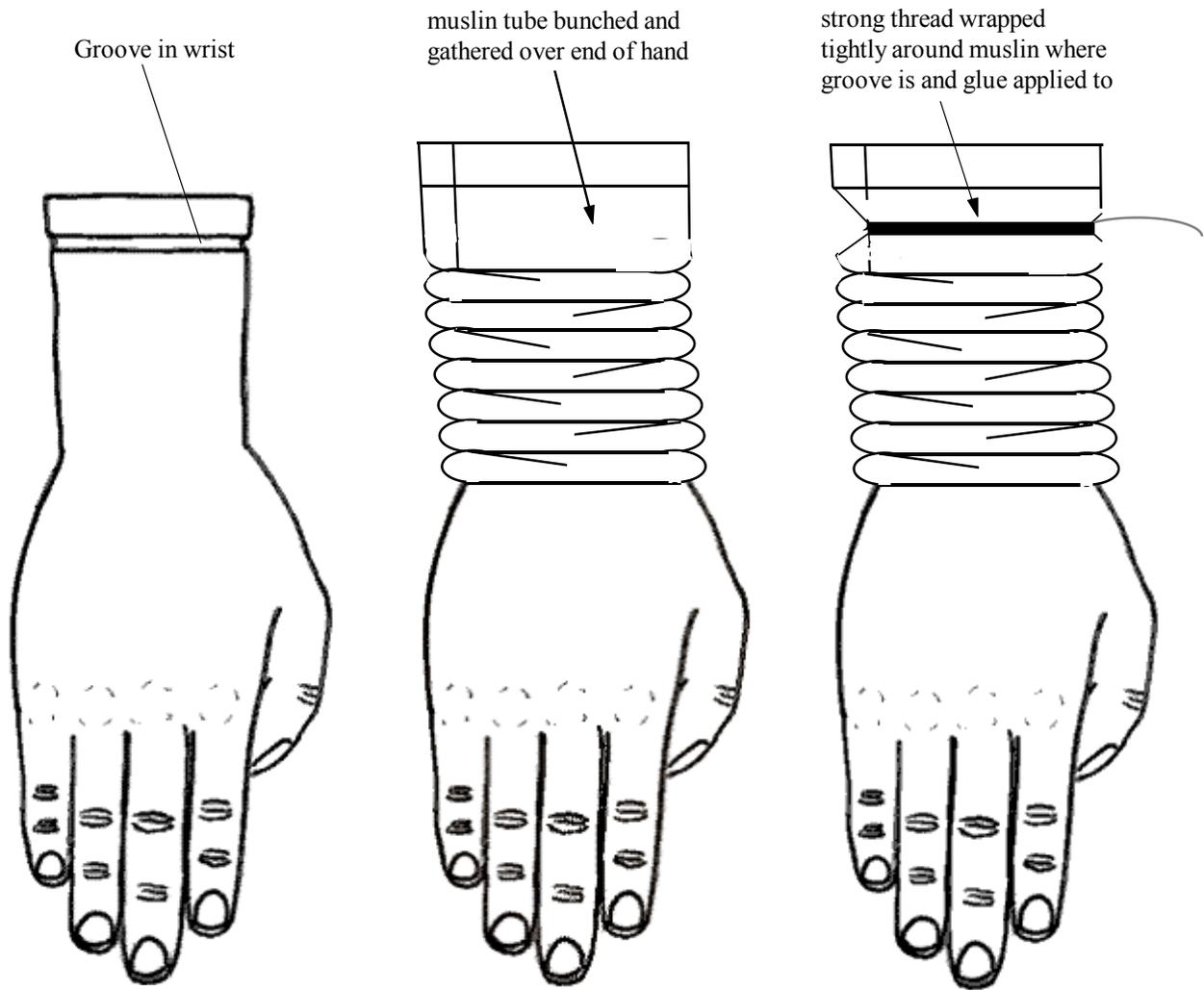
Fold the muslin material in half and sew along the top and the one side. Sew 1/2" inch in from the edge. This is called sewing with a half inch seam allowance. If your not good at sewing, get a friend or relative to sew these for you. Leave the one end open. See illustration at right.

The same can be done for the legs. The muslin tubes need to be long enough so that the combined length of the cast foot and muslin is about 18" inches from the heel of the foot to the bottom of the body. This combined with body and head measurements should make a nice 40" inch figure. You can also make the top of the leg tubes bigger around than they are where they connect to the top of the foot casting.



Muslin fabric folded and sewn, one end left open  
Cloth part of arms and legs are done the same

Leave the muslin inside out (with the seams on the outside) for the next step. Take the open end of the sewn muslin arm (or leg) and place it over the wrist of the hand casting (or ankle of a foot casting). Keep sliding the fabric, bunching and gathering it as necessary until the top end (which is sewn closed) meets the open end of the wrist. Take a rubber band to hold the muslin firmly against the end of the wrist temporarily.



Cast hand with groove in wrist

Muslin tube set on end of hand

Thread wrapped around groove



Muslin attached to feet castings



Muslin attached to hands and an elbow joint sewn

Wind some thread around the muslin and the wrist (specifically where the indentation or groove is). Put numerous windings of strong thread around the muslin, precisely where the indentation in the casting is. Take some craft glue or white glue and brush it onto the tightly wound thread. The glue and thread combined like this are very strong together (same principle as glass cloth and resin). Be careful not to use too much glue or it will soak through to the muslin and will show on the finished arm or leg when you turn the muslin back right-side-in. You mostly only need enough to keep the thread from unwinding. It is best to use a glue that dries somewhat rigid as opposed to a glue that dries flexible. Let the glue dry completely before turning the muslin arm back right side in. This is the method the author first presented in his kit building instructions back in 1994. This produces a very professional looking and durable attachment of the muslin to the cast hands or feet. See illustrations and photos previous page.

Repeat the above steps for the other hand casting, and/or foot castings if you have them. The beauty of the above method is that this also seals the opening of the hand or foot casting while at the same time securely attaching the muslin to the hand or foot castings. When you go to put the stuffing in the arms or legs, it won't go down into the hands or feet, taking up extra stuffing.

Purchase some toy/doll stuffing from the fabric or craft store to stuff the arms and legs with. Begin slowly to turn the muslin tubes right-side-in and start filling the arms and legs with as much stuffing as they will hold, ever so slightly over stuffing them. Keep in mind that the stuffing will tend to settle, so it's better to over stuff a little than to under stuff. Some figure makers put in an elbow joint, some do not. Legs are generally much nicer if they have a knee joint.

If you are going to do an elbow or knee joint, they are basically done the same way. You stuff the muslin about half way up the arm or leg and then sew across the muslin twice (two separate lines of sewing), one half inch apart. So the elbow or knee joint is effectively one half inch of muslin with no stuffing in it. See photo previous page. Then stuff the remainder of the muslin tube as necessary.

Finally take the open end of the muslin (this is where having a little extra comes into play), and fold the end over one inch, and then fold again one half inch. This creates several thickness' of muslin which makes it nice for attaching the muslin to the shoulders or the legs to the bottom of the body. The folds in the muslin arms should be such that the hand will hang properly at the side of the body when attached. The folds for the legs should be such that the feet are pointing ever so slightly outwards, to have a natural appearance. Sew the folds together on the ends of each individual arm or leg so they will not come apart later.

See our web site pages on **Figure Making** for more free info and Mike's books for more info.....

<http://www.puppetsandprops.com/FigMakInfo.html>  
<http://www.puppetsandprops.com/DummyBooks.html>  
[http://www.puppetsandprops.com/winker\\_book.html](http://www.puppetsandprops.com/winker_book.html)

## ***Important! Cleaning, Painting, & Copyright Information***

***General Painting Instructions:*** Wash the castings completely with a strong dishwashing detergent (that cuts grease), inside and out. Rinse and dry thoroughly!

Sanding (etching) the castings with sandpaper (100 grit sandpaper is good) will help promote good adhesion of paint or patching/altering putty materials. Be careful not to sand away the details. **Note:** ***This sanding (or etching) of the castings is the most important step for good paint adhesion! Be sure not to miss any areas that will receive paint.*** Use fresh sandpaper, and replace if it is starting to clog or loose it's edge while sanding. Patching (if its even needed) or altering some of the castings some is best done with a material like Apoxie Sculpt, available here.....

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## **Copyright Information - Please Read!**

The original purpose of these kits was to help others build their own pro style figure, as this can be quite a daunting process. It is realized however that the use of these kits could be abused (and some abuses have been reported already). If abuses do occur, we reserve the right to refuse selling these kits to anyone. That should not be a problem as long as the kits continue to be used in the way they were originally intended to be used. The heads, hands, feet and body castings are original sculpted pieces by Michael Brose (owner of Puppets and Props) and have full copyright protection. It is unlawful to reproduce these items (i.e., make molds from the copyrighted castings and then make your own castings from same) and resell to others either unfinished, finished or part of a completed figure. Unlawfully reproducing them and selling them to others or selling figures with unlawfully reproduced copyrighted pieces attached, however, is fully punishable by law and will be pursued by a legal entity representing Michael Brose (Puppets and Props). If you have any questions related to copyright issues, please contact:

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