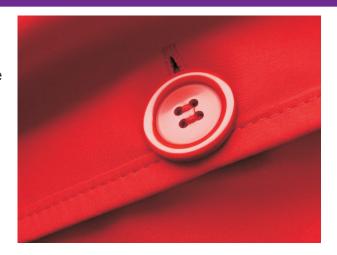
# **Buttons and Buttonholes**

BUTTONS AND BUTTONHOLES are some of the most common fastener choices for garments. The two main types of buttons are flat and shank: flat buttons and shank buttons are found in a wide variety of sizes, shapes, and colors. Buttonholes can be as detailed as a tailored bound buttonhole, as delicate as a hand-sewn buttonhole, or as simple as a machine-stitched buttonhole.



### **Objective:**



Demonstrate button application and buttonhole construction.

### **Key Terms:**



bar tacks
bound buttonholes
button
button loops
buttonhole stitch
buttonhole twist
buttonholes

Chinese ball button flat button frog hand-stitched buttonholes lips

machine-stitched buttonholes sew-through button shank button thread water-soluble marker zigzag stitch

# **Understanding Buttons and Buttonholes**

## **BUTTONS AND BUTTON APPLICATION**

A **button** is a small knob or disk sewn onto a garment to fasten or decorate. A button is often the fastener of choice for garments. Attaching a button to a garment requires choosing the correct thread type, too. Fortunately, a button is a strong fastener and is able to withstand intense pulling and straining. Buttons come in a variety of sizes, shapes, and colors. They have a flat surface with two or four pierced holes to facilitate attachment or a shank on the back for attachment purposes. Buttons are used as fasteners and as decorative touches.



### **Thread and Needles**

**Thread** is a group of textile fibers that, when twisted together, form a continuous filament strand for sewing. When attaching buttons, a person chooses thread appropriate for the fabric. Typically, thread used to apply a button is chosen to match the button, unless a contrasting color is desired for decorative purposes. Buttons are often sewn using a double strand of thread. Yet heavy garments may require heavyduty thread for extra strength. Buttons can be sewn using general thread or silk thread.

Tips for sewing buttons:

• TIP 1: To attach buttons to light or medium weight fabrics, choose size D buttonhole twist or a general thread. **Buttonhole twist** is a strong, silk thread with a special twist for making hand-worked

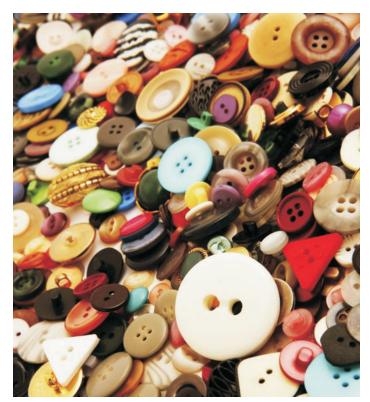


FIGURE 1. Buttons and buttonholes are all sizes and shapes. How often do you find buttons and buttonholes the fastener of choice in the garments you buy?

buttonholes, sewing on buttons, and decorative hand or machine stitching.

- TIP 2: To prevent tangles when hand sewing, one can run the thread through beeswax.
- TIP 3: To attach buttons to knits, stretch, man-made, and most drip-dry fabrics, use synthetic thread. Synthetic thread is a polyester thread.
- TIP 4: To select a needle, choose one that is long enough to easily pass through the thickness of the fabric.
- TIP 5: To select the right size button, consult the pattern envelope. Button size is determined by the diameter (width) of the button.

# Sewing on a Button: General Information

The steps to sewing on a button depend on button type being attached. Once a decision is made as to the button, the attachment method can be determined. Buttons are one of the last items sewn to a garment.

- Buttons used for decorative purposes are usually sewn flat against the fabric.
- Buttons used as fasteners (which include a buttonhole) are sewn with a thread shank.
- Buttons are placed in accordance with the buttonhole. Buttonholes must be made before buttons are attached to the garment.



- Buttons are sewn on the centerline pattern markings (center front, center back, cuff, collar, etc.)
- Small buttons are typically placed closer together while larger buttons may be spaced farther apart.

### **Flat Buttons**

A **flat button** is a button with pierced holes on the face. **Sew-through button** is another name for a flat button. A flat button will have either two or four holes for attaching to a garment. A person would use the following basic application sequence to apply a flat or sewn-through button:



FIGURE 2. A button is a small knob or disk sewn onto a garment to fasten or decorate. Are the buttons pictured here primarily fasteners or decoration? Can a button serve both purposes?

- STEP 1: Thread a needle so there are two equal lengths of thread.
- STEP 2: Tie a knot at the end of the thread lengths. This provides double strands of thread when stitching.
- STEP 3: Mark the button placement on the right side of the fabric. A **water-soluble marking tool** (an item that has marks that will "erase" with water) or a pin can be used to make this mark.
- STEP 4: At the mark, take a few small stitches to secure the thread.
- STEP 5: Place a toothpick, heavy pin, or similar object across the bottom of the button.
- STEP 6: Stitch by bringing the needle up through one hole and then down through a second hole. If the button has four holes, bring the needle up through one hole, down through the second hole up through the third hole and down through the fourth hole.
- STEP 7: Repeat the last step for five or six stitches.
- STEP 8: Remove the pin, pick, or other item used to create the thread shank.
- STEP 9: Lift the button from the fabric and firmly wind the thread around the stitches to make a thread shank.
- STEP 10: Backstitch to secure.

#### Shank Buttons

A **shank button** is a button with a flat front (and no holes) and a hollow protrusion on the back through which thread is sewn for attachment to a garment. The shank may be made of metal or plastic. A shank button is a good choice for thick fabric, as the shank provides added



depth to allow the button to easily pass through the buttonhole with room to spare. A shank button often gives a more formal look, as there is no visible stitching on the garment. A person would use the following basic application sequence to apply a shank button:

- STEP 1: Thread a needle so there are two equal lengths of thread.
- STEP 2: Tie a knot at the end of the thread lengths. This provides double strands of thread when stitching.
- STEP 3: Mark on the right side of the fabric where the button is to be attached. A water-soluble marking tool or a pin can be used to make this mark.
- STEP 4: At the mark, take a small stitch through the right side of the fabric and the shank to begin stitching the button.
- STEP 5: Continue to pass the needle through the right side of the fabric and then the shank. Keep all stitches consistent in size and location.
- STEP 6: Secure the shank to the right side by tightly pulling the threads. The button should now be flush with the fabric.
- ◆ STEP 7: Then, form a knot with the last stitch. To create this knot, leave a loop of thread open and then place the needle through the loop and tighten to form a knot. Repeat this step if necessary to secure.
- Some sewing machines are equipped to sew on 2- or 4hole flat buttons. Consult the machine manual for details.



FIGURE 3. A shank button is a button with a flat front (and no holes) and a hollow protrusion on the back through which thread is sewn for attachment to a garment. Which of the buttons pictured here are shank buttons?

## **BUTTONHOLE CONSTRUCTION**

**Buttonholes** are the openings (slots) in a garment that allow buttons to pass through, fastening one piece of the garment to another. They are the companions to buttons to create a fastening to open and close a garment. A variety of methods exist to make a buttonhole: bound, machine, hand-stitched, and frogs. Historically, anyone who sewed had to learn to make bound buttonholes. With the sewing machines of today, the majority of buttonholes are made by machine. This method is much easier to complete for all levels of seamsters and seamstresses.



# **UNDER INVESTIGATION...**

## LAB CONNECTION: Sewing on a Button

Find an old shirt from which you can cut a button. Cut the threads only; you will be sewing this button back on the garment. Determine the type of button you are sewing back on, flat button or shank. Follow the directions in this lesson for sewing on a button. Use the correct technique for the type of button that you are sewing on the shirt. Turn the completed shirt and list of the steps you used to fasten the button back onto the shirt into your instructor.

### **Buttonhole Placement**

The placement of the buttonhole is shown on the pattern pieces. Place the mark of the buttonhole on the right side of the fabric. Adjusting the length of the pattern would require the adjustment to the buttonhole placement. Buttonholes are generally spaced evenly between the top-marked buttonhole and the bottom-marked buttonhole. Buttonholes are positioned either horizontally—used on most jackets and dresses—or vertically—used on shirt bands. Buttonholes are sewn an appropriate distance from the edge of the fabric so that the button does not extend beyond the edge of the garment when buttoned/fastened. Patterns are designed for a specific button size; button size is stated on the back of the pattern envelope under "Notions."

The button/buttonhole placket and the centerline mark have been specifically designed with the stated button size in mind.

To determine the length of the buttonhole for a specific button, add together the:

- Diameter of the button
- ♦ Thickness of the button
- ♦ Plus 1/8-inch to accommodate for fabric thickness
- Exceptions to the formula are:
- Very small buttons where less length is needed.
- Dome or round buttons. To determine buttonhole size for a ball button, place a string around the button, remove, and fold in half.
- Fabric-covered buttons of heavy fabrics where more length is needed. To save wear and tear on buttonholes, they need to large enough for buttons to slip through, but small enough to prevent unbuttoning during wear.

# **Buttonhole Types**

**Bound buttonholes** are fabric-lipped buttonholes used in tailored garments. The bound buttonhole adds durability to the garment. The well-made bound buttonhole lies flat, and the **lips**—inner fabric edges—are set in a rectangle with perfectly square corners. A variety of methods exist for making bound buttonholes. Complete the steps described by <a href="http://www.simplicity.com">http://www.simplicity.com</a> to complete one method of bound buttonholes.



**Machine-stitched button**holes are buttonholes made with a zigzag stitch. A zigzag stitch is a reinforcing or decorative stitch pattern created by a series of short sharp turns or angles. All machine-stitched buttonholes have two straight lines of zigzag stitches with bar tacks. Bar **tacks** are a series of tight zigzag stitches used to reinforce stress areas on buttonholes, belt loops, pocket openings, fly front openings, military uniforms, and sportswear and gear. Some sewing machines have buttonhole attachments that are manually operated,



FIGURE 4. Machine-stitched buttonholes are buttonholes made with a zigzag stitch. Zigzag stitch is a reinforcing or decorative stitch pattern created by a series of short sharp turns or angles. Making machine-stitched buttonholes has become common with the addition of the machine-stitched buttonholer or a buttonhole attachment for sewing machines.

while other sewing machines attachments are built in. It is always wise to do a sample buttonhole on a piece of scrap fabric. Complete the following steps when making a machine buttonhole:

- STEP 1: Mark the length of the buttonhole on the right side of garment.
- STEP 2: Following machine instructions, stitch the buttonhole.
- STEP 3: Open the buttonhole. Place a pin across the ends of the buttonhole to prevent cutting through the ends of the buttonhole. Using small scissors cut open the center of the buttonhole. Cut from the center of the buttonhole in both directions.

### Hand-Stitched Buttonholes

**Hand-stitched buttonholes** are buttonholes sewn by hand using a buttonhole stitch. A **buttonhole stitch** is a stitch that catches a loop of the thread on the surface of the fabric. At a right angle from the starting point, it is necessary to return the needle to the back of the fabric and then to take the needle and return it to the back of the fabric. This buttonhole is primarily used on lightweight or loosely woven fabrics.

# **Button Loops**

**Button loops** are fasteners that use a button with a thread or fabric loop instead of a buttonhole. The button loop is made of a narrow fabric tube or a thread. Button loops look best with ball or toggle buttons. Button loops may be set in the seam at the opening edge of a garment or part of a frog used as a decorative closure.

A **frog** (sometimes known as a Chinese frog) is an ornamental braiding that consists of a button and a loop. The frog is often matched with a Chinese ball button.





# **FURTHER EXPLORATION...**

### **ONLINE CONNECTION: Frogs and Chinese Ball Buttons**

Research the use of frogs and Chinese ball buttons in fashion. Watch the "How to Make a Chinese Frog Button Knot" video at <a href="https://www.youtube.com/watch?v=klZHKBlvH5c">https://www.youtube.com/watch?v=klZHKBlvH5c</a>. In which time periods have these fasteners appeared on garments? Are we seeing these on garments today? Find a picture or two of garments that have used these for decorative purpose. Write a brief summary of the information you have found. Attach the pictures you have found, and give your opinion as to whether the frog and Chinese ball button enhance the look of the garment and why. Demonstrate how to make a Chinese frog button knot.

The **Chinese ball button** is a button made of cord, braid, or fabric tubing. When making the button, the size of the tubing should be kept proportionate.

### **Summary:**



Buttons and buttonholes are popular fasteners in the garment industry. We all have buttons and buttonholes on our clothing. Buttons are generally flat or shank types. Thread shanks are added when securing two pieces of a garment together. Flat buttons are often used for decorative purposes and do not need a shank. Shank buttons give a more formal look and offer depth for thick fabrics.

Buttonholes are made in various ways. Machine-buttonholes are the most common buttonhole and are easy to construct because of modern sewing machine attachments. Bound buttonholes are one of the most difficult buttonhole constructions; we use them primarily on tailored garments. Some delicate fabrics need a hand-stitched buttonhole. It will be done with a needle, thread, and the buttonhole stitch. Button loops are a decorative form of securing a button closure. The frog and Chinese ball button are common decorative button loop closures.

# **Checking Your Knowledge:**



- 1. What type of button would you choose for a heavy winter coat? What would explain your answer?
- 2. Why are flat buttons used more often than shank buttons for decorative purposes?
- 3. Why are machine-stitched buttonholes the most common type of buttonhole today?



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- 4. What is a thread shank? Why are thread shanks added to a flat button fastener application?
- 5. Describe the placement of buttons and buttonholes on garments.

# **Expanding Your Knowledge:**



Read an article about tailoring and bound buttonholes. List any vocabulary words that are unfamiliar. Then do a bit of research. In your own words, write a definition for each of those unfamiliar vocabulary words. Write a summary of the bound buttonhole process. Cite the article.

#### **Web Links:**



#### **Buttonhole Video**

https://www.youtube.com/watch?v=Wcf9iJHST94

#### **Machine Buttonhole**

https://www.youtube.com/watch?v=85Fa-1j2w6E

#### **Sew Bound Buttonholes**

http://whafi.com/sewing-techniques/how-to-sew-bound-buttonholes

#### How to Sew on a Button

http://www.instructables.com/id/How-to-sew-on-a-button/

#### How to Sew on a Shank Button

http://sewing.about.com/od/beginner1/ht/htshankbutton.htm

### Sewing on a Shank Button

http://www.monkeysee.com/play/2153-sewing-on-shank-buttons

