

Zipper Applications

ZIPPER PARTS have names: chain, tape, slider, teeth, etc. Can you point to these four parts on this zipper image? Zippers are fasteners that secure portions of a garment and add shape and contour. A variety of zipper applications exist. The best zipper for a project depends on the garment use: fly front, lapped, invisible, exposed, and separating.



Objective:



Select zipper applications and attachments for specific garments.

Key Terms:



backstitching

bar tack

bottom stop

buttonhole twist thread

centered zipper

chain

couture

exposed zipper

fasteners

fly front zipper

handpicked zipper

invisible zipper

invisible zipper foot

lapped zipper

prickstitch

pull tab

separating zipper

slider

tape

teeth

topstitching

top stop

zipper coil

zipper foot

zippers

Understanding Zipper Applications

Zipper applications are not the same for all items. The proper type depends on the purpose or use of the item.

FASTENERS

Fasteners are devices that hold two objects or parts together that are at times required to be separate, such as two pieces of a garment. Fastenings help create the “fit” of the garment and

often add to its decorative design aesthetic. Numerous types of fasteners are used in clothing construction, including belts, sashes, braces (suspenders), cummerbunds, buttons, eyelets, grommets, hook and eye, laces, snaps, toggles, and Velcro.

ZIPPERS

Zippers are fastening devices made of two rows of metal or plastic teeth held together by a sliding tab that makes the teeth fit together or come apart. They are the most often used form of fastening device. A poorly installed or ill-fitting zipper application can ruin the “look” of a garment. A variety of zipper applications exist for zipper insertion, each with a specific use and primary task. It is important to take into consideration the fabric being used and the finished look for a garment when deciding upon the proper zipper application. Zipper parts include the chain, teeth, slider, pull tab, tape, top stop, and bottom stop.



FIGURE 1. What is the advantage of using Velcro for these toddler boots rather than laces or hook and eye fasteners?

Chain

The **chain** is the continuous piece formed when both halves of a zipper are meshed together.

Teeth

The **teeth** are the individual elements that make up the chain.

Slider

A **slider** is the device that moves up and down the chain to open or close the zipper.

Pull Tab

A **pull tab** is the part of the slider held to move the slider up or down.

Tape

Tape is the fabric part of the zipper.

Top Stop

The **top stop** is two devices attached to the top end of a zipper to prevent the slider from coming off the chain.

Bottom Stop

The **bottom stop** is a device attached to the bottom end of the zipper to prevent the slider from coming off the chain.

ZIPPER APPLICATIONS

Each type of zipper application has slightly different steps. The pattern instructions will include the detailed steps for a specific zipper application. If you are making something that does not have instructions for zipper insertion, you can find tutorials in books and on the Internet, such as on YouTube.

Lapped Zipper

A **lapped zipper** is a fastener that uses a fold of fabric to cover the zipper from one side and is then topstitched across the bottom and up one side of the zipper. A lapped zipper is generally found in a dress, skirt, and pants. This zipper type is generally located in the back center and in the left seam (when not located in the back center). The following basic application sequence is used for a lapped zipper:

- ◆ STEP 1: Mark the length of the zipper in the seam.
- ◆ STEP 2: Stitch the seam below the zipper.
- ◆ STEP 3: Press the front edge of the opening to the wrong side, along the seam line.
- ◆ STEP 4: Press the back edge of the zipper opening to the wrong side. Press this side under $\frac{1}{2}$ inch.
- ◆ STEP 5: Pin the zipper right side up along the edge with a $\frac{1}{2}$ -inch seam allowance. Place the folded edge along the zipper coil.

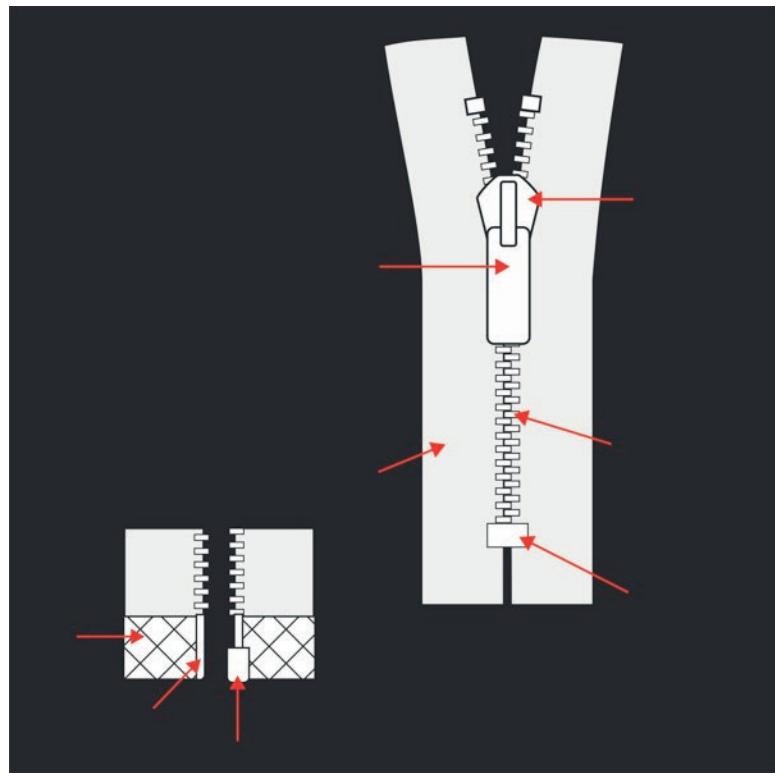


FIGURE 2. Based on the definitions, can you identify the parts of a zipper indicated by the red arrows?

- ◆ STEP 6: Use the zipper foot to stitch close to the edge of the seam allowance from the bottom to the top of the zipper.
- ◆ STEP 7: Lay the $\frac{5}{8}$ -inch seam allowance over the zipper so the folded edge just covers the machine stitching.
- ◆ STEP 8: Pin the zipper in place.
- ◆ STEP 9: Topstitch across the bottom. Then pivot and stitch to within 1 inch of the top. **Topstitching** is stitching made on the outside of the garment. It is often used to highlight garment details (e.g., lapels, pockets, cuffs, collars, and appliqués).
- ◆ STEP 10: Leave the needle in place. Then move the zipper pull down. Next, continue to stitch to the top and pull up the zipper.



FIGURE 3. A lapped zipper is a fastener that uses a fold of fabric to cover the zipper itself from one side and is then topstitched across the bottom and up one side of the zipper. Lapped zippers are generally found in dress, skirt, and pant garments.

Centered Zipper

A **centered zipper** is a fastener in which the teeth of the zipper are found in the center (e.g., where a seam would have been). Typically, there is an equal amount of fabric on each side of the centered zipper—found in the center back or front of dresses or skirts and on sleeves and accessories. The following basic application sequence is used to apply a centered zipper:

- ◆ Measure and mark the length of the zipper.
- ◆ Machine-baste the seam from the top to the bottom of the zipper, and change to a regular stitch to end the seam.
- ◆ Press the seam open.



UNDER INVESTIGATION...

LAB CONNECTION: Lapped Zipper Application

The lapped zipper is an easy application to begin learning about sewing a zipper. You can follow the directions on the zipper package or the instructions on the lapped zipper directions above to insert a zipper into the fabric seam. To learn more about inserting a lapped zipper watch the YouTube video at <https://www.youtube.com/watch?v=-vE2TOMowjk>.

- ◆ Place the zipper face down, with the top of the zipper at the edge of the seam and the coil centered in the seam. Use pins to hold the zipper in place.
- ◆ Extend one seam allowance, using the zipper foot. Machine-baste along the stitch line of the zipper tape. A **zipper foot** is an attachment for the sewing machine that can be adjusted to position it to the right or left side of the needle. Machine-baste along the stitch line of the zipper tape.



FIGURE 4. A zipper foot is an attachment for the sewing machine that can be adjusted to position it to the right or left side of the needle. What type of zipper application is shown here?

- ◆ Extend the remaining seam allowance, and machine-baste the other extended seam allowance from the bottom to the top.
- ◆ Turn to the right side of the fabric, and lay it flat.
- ◆ Hand-baste from the bottom to the top until approximately $\frac{1}{4}$ inch from the top.
- ◆ Use the zipper foot attachment to topstitch on the outside along the sides and across the bottom of the zipper.
- ◆ Remove the basting.

Fly Front Zipper

The **fly front zipper** is a fastening device concealed by a flap of material down one side of the garment's front opening. This zipper is generally found in trousers, jeans, pants, and skirts. Women's garments are generally lapped in a right-over-left direction, and men's garments are generally lapped in a left-over-right direction. The following basic application sequence is used to apply a fly front zipper:

- ◆ The fly placket generally starts 2 inches from the crotch junction.
- ◆ Mark the location of the zipper.
- ◆ Stitch the front seam below the zipper.
- ◆ Press "under" the right-front and left-front seam allowances. These allowances will be different amounts; follow the pattern instructions.
- ◆ Pin the zipper along the left front seam allowance.
- ◆ Use the zipper foot attachment to topstitch close to the folded edge, stitching from the bottom to the top next to the zipper coil.

- ◆ Place the fabric's right sides together. With a zipper foot, stitch from the bottom to the top.
- ◆ Turn the fabric to the right side, and topstitch using as many rows of stitching as called for on the pattern.
- ◆ Add a bar tack at the bottom of the zipper. A **bar tack** is a row of stitches used to reinforce stress areas on a garment.

Invisible Zipper

An **invisible zipper** is a specialty fastener hidden in the seam of the garment. This special zipper typically requires the use of an invisible zipper foot. An **invisible zipper foot** is a specialty device in which the grooves on the bottom of the foot keep the coils of the zipper from sliding while being sewn. The following basic application sequence is used to apply an invisible zipper:

- ◆ Attach the special invisible zipper foot to the machine.
- ◆ The seam is not stitched.
- ◆ Place the opened zipper upside down, and press the zipper coil flat. The **zipper coil** is the part of the zipper that has the teeth.
- ◆ Place the coil $\frac{5}{8}$ inch from the top edge of the garment.
- ◆ Place the zipper on the right side of the right back garment piece.
- ◆ Ensure the zipper coil is placed along the seam line.
- ◆ Pin the zipper in place.
- ◆ Attach the zipper to the garment by feeding the zipper coil into the right-hand groove of the zipper foot attachment. Stitch until the zipper head is reached. Repeat for the left side. Backstitch at the end of the zipper. **Backstitching** is using the reverse stitch on the sewing machine to secure the thread ends at the beginning and/or at the end of a stitching line. Adding a couple stitches secures the zipper.
- ◆ Close the zipper.
- ◆ Attach a regular zipper foot positioned to the left of the needle. Baste the seam below the zipper; stitch the seam below the zipper.
- ◆ To hold down the zipper, stitch the ends of it to the seam allowance only.



FIGURE 5. The tailor selected an invisible zipper application for this red satin dress fabric. What explains that choice?

Handpicked Zipper

A **handpicked zipper** is a fastener finished by hand stitching the zipper across the bottom and up both sides. A handpicked zipper is finished with a **prickstitch**, which is a decorative backstitch. It is usually selected for use on delicate fabrics (e.g., chiffon, lace, and velvet). The use of a prickstitch gives the garment a more couture look. **Couture** is high-end designer or custom-made clothing with hand-applied finishes. The following basic application sequence is used for a handpicked zipper:

- ◆ Use a silk buttonhole twist or polyester cotton thread for this zipper. **Buttonhole twist thread** is a strong, thick silk thread used for decorative hand stitching.
- ◆ Complete the zipper applications as instructed in the pattern until the topstitching step.
- ◆ Take a stitch $\frac{1}{16}$ inch from the seam line at the bottom of the zipper.
- ◆ Backstitch onto the seam.
- ◆ Bring the needle up $\frac{1}{4}$ inch in front of the first stitch. Continue this back and forward stitching process until the zipper is stitched across the bottom and up the side.
- ◆ Pull the stitches tightly so they sink into the fabric.

Separating Zipper

A **separating zipper** is a fastener that completely splits apart. It is also known as a jacket zipper or an open-end zipper and may be used in coats, jackets, athletic wear, and other miscellaneous garments and accessory items. A separating zipper is best sewn into the garment prior to attaching the facings and hems. The following basic application sequence is used for a separating zipper:

- ◆ Machine-baste the zipper opening closed.
- ◆ Press the seam open.
- ◆ Place the closed zipper face down on the seam allowances, centering the chain over the seam.
- ◆ Extend the seam allowance and tape; machine-baste down the center of the tape.
- ◆ Keeping the pull tab up, machine-baste the free side of the zipper tape down.
- ◆ Hand-baste the seam allowances and zipper to the garment from the right side $\frac{1}{4}$ inch on either side of the seam allowance.
- ◆ Topstitch each side of the zipper just outside the basting line. Then remove the basting.
- ◆ Turn the top tape ends under at a slight slant to ensure they will not be caught in the teeth when the zipper is engaged.
- ◆ Turn under and slipstitch the hem edges to the zipper tape.



FURTHER EXPLORATION...

ONLINE CONNECTION: Exposed Zippers in Fashion

In fashion design, exposed zippers have been popular throughout history. Use <http://www.fashion-era.com/> to find an historical period that used exposed zippers in garment design. Print three pictures from this period. Label each picture for its period in history, and describe how you feel the exposed zipper improved the appeal and look of the garment.

Exposed Zipper

An **exposed zipper** is a fastener used as a decorative design element in fashion in which the zipper tape is visible on the outside of the garment. Pattern directions must be followed to apply this zipper.

ZIPPER TIPS AND TOOLS

Some tips and tools can be extremely useful for inserting zippers.

Tips

- ◆ Buy a zipper appropriate for the garment fabric to be used.
 - A lightweight polyester coil zipper is a good choice for a lightweight fabric.
 - A heavy metal zipper is a good choice for a heavy coat that will “see a lot of use.”
- ◆ Preshrink the zipper: Preshrink the zipper by soaking it in hot water for a few minutes prior to use. Preshrinking ensures the zipper will not pucker the garment after it is washed.
- ◆ Select the appropriate zipper foot attachment:
 - When available, use the standard zipper foot attachment for the particular machine to ensure a more professional finish.
 - When available, use the invisible zipper foot attachment for the particular machine to ensure a more professional finish and for ease of insertion.
- ◆ Use buttonhole twist thread for a more professional finish. It is a thick multi-strand and polished thread used for decorative topstitching. It adds strength to the buttonhole opening and is available at most fabric stores.
- ◆ The back of the pattern envelope provides additional information about zipper length and suggested type needed for the garment. Follow pattern instructions for zipper application.

Summary:



The zipper is a fastener that has been used in garments for a long time. A variety of zipper applications are available. The type of zipper application you select will depend on the garment and the fabric choice. Zippers are functional because they secure two garment pieces. In addition, they are decorative. Zipper information is found on pattern envelopes, in books, on the Internet, and on the zipper packaging. Zipper foot attachments make inserting the zipper easier.

Checking Your Knowledge:



1. Which zipper type is most often used in sportswear and in jackets and coats?
2. List two zipper types used in jeans and pants.
3. How can you use the zipper lap in a fly front zipper to tell if it is a pair of men's jeans or women's jeans?
4. Describe how a zipper foot attachment makes inserting the zipper easier.
5. How does a pattern envelope help you select the correct zipper for your garment?

Web Links:



Zipper Foot

<https://www.youtube.com/watch?v=QiU-QI0koG4>

Fashion History

http://www.fashion-era.com/stylish_thirties.htm

Zipper Insertion

<http://www.threadsmagazine.com/item/42874/tips-for-a-successful-zipper-insertion>