Chapter 7:
Four-Thread Ultra-Stretch Mock Safety Stitch
The Four-Thread Ultra-Stretch Mock Safety Stitch is stronger than the Three-Thread Ultra-Stretch Mock Safety Stitch. The additional thread provides added strength to the seam and is good choice for knits as well as wovens. This stitch works well when applying ribbing to a garment. Ribbing is often seen on cuffs, collars and waistbands of active wear. This stitch requires two needle threads and two looper threads.
**Needle:**

- Left Overedge Needle "A" (Threaded)
- Right Overedge Needle "B" (Threaded)
- Cover Stitch Left Needle "C" (Not Threaded)
- Cover Stitch Right Needle "E" (Not Threaded)
- Cover Stitch Middle Needle/Chain Stitch Needle "D" (Not Threaded)

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<table>
<thead>
<tr>
<th>ATD:</th>
<th>Set at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Tension Dial</td>
<td>&quot;A&quot;</td>
</tr>
<tr>
<td>Left Cover Stitch Needle &quot;C&quot;</td>
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</tr>
<tr>
<td>Middle Cover Stitch Needle &quot;D&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Right Cover Stitch Needle &quot;E&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Left Needle &quot;A&quot; (Orange)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Overedge Right Needle &quot;B&quot; (Blue)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper (Green)</td>
<td>Looper Engaged and Threaded</td>
</tr>
<tr>
<td>Spreader</td>
<td>Disengaged</td>
</tr>
<tr>
<td>Lower Looper (Red)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Chain Stitch Looper (Brown)</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Upper Looper Clutch</td>
<td>&quot;L&quot;</td>
</tr>
<tr>
<td>Upper Knife</td>
<td>Engaged</td>
</tr>
<tr>
<td>Seam Guide Plate</td>
<td>Not Installed Use Knife Guide</td>
</tr>
<tr>
<td>Seam Width Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Length Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Presser Foot Pressure</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Differential Feed Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Finger</td>
<td>&quot;N&quot;</td>
</tr>
</tbody>
</table>
• Turn Auto Tension Dial to “A”.

• Turn Stitch Length Dial to “N”

• Engage Upper Knife. The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder clockwise until the knife clicks into a lock position.
• Turn Presser Foot Pressure Dial to “N”.

• Turn Differential Feed Dial to “N”.

• Turn Seam Width Dial to “N”.

• Set Stitch Finger to “N”.

Four-Thread Ultra-Stretch Mock Safety Stitch page 5
Install the Knife Cover.

Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.
1. Push the clutch button to the left and down to engage.
2. Turn handwheel.

Upper Looper Disengaged

Upper Looper Engaged
Disengage Spreader. The Upper Looper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper’s hole. The Spreader is disengaged when the Upper Looper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric’s edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looper.

Thread Upper Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.
7. Thread the hole in the Upper Looper from front to back ®. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

- Thread Lower Looper with regular overlock thread.
  1. Raise the Presser Foot to release the Tension disks. Thread the Lower Looper as illustrated 1-10.
  2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread, firmly pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

9. Place the thread through ⑥, ⑦, and ⑧.
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.

5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

6. Thread the eye of the Overedge Right Needle ⑨.
Thread Left Overlock needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread towards the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is **behind** the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Left Overedge Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
TRY IT:

- Fold ribbing lengthwise.
- Place ribbing on top of fleece.
- Align the fabric so that the knife just slightly trims both the ribbing and fleece fabric edges.
- Sew, stretching the ribbing as needed.
Chapter 8:
Four-Thread Safety Stitch
Four-Thread Safety Stitch

This stitch is an alternative to the Five-Thread Safety Stitch. It offers the same type of Two-Thread Chainstitch. However the Three-Thread Overlock is now replaced by a Two-Thread Overedge finish. The Four-Thread Safety Stitch is appropriately used when sewing a medium weight woven fabric. Because there is one less thread being used, the stitch is less bulky. However, it is still strong enough not to require straight stitch reinforcement from a conventional sewing machine. This stitch requires two needle threads and two looper threads.
**Needle:**

- Left Overedge Needle "A" - Not Threaded
- Middle Cover Stitch Needle "C" - Not Threaded
- Right Cover Stitch Needle "E" - Not Threaded
- Overedge Left Needle "A" - Not Threaded
- Overedge Right Needle "B" (Blue) - Threaded
- Upper Looper - Looper Engaged and Not Threaded
- Lower Looper (Red) - Threaded
- Chain Stitch Looper (Brown) - Threaded
- Upper Looper Clutch - "L"
- Upper Knife - Engaged
- Seam Guide Plate - Not Installed
- Seam Width Dial - "N"
- Stitch Length Dial - "N"
- Presser Foot Pressure - "N"
- Differential Feed Dial - "N"
- Stitch Finger - "N"

**Set at:**

<table>
<thead>
<tr>
<th>ATD: Auto Tension Dial</th>
<th>&quot;i&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Cover Stitch Needle &quot;C&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Middle Cover Stitch Needle &quot;D&quot; (Orange)</td>
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</tr>
<tr>
<td>Right Cover Stitch Needle &quot;E&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Left Needle &quot;A&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Right Needle &quot;B&quot; (Blue)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper</td>
<td>Looper Engaged and Not Threaded</td>
</tr>
<tr>
<td>Spreader</td>
<td>Engaged</td>
</tr>
<tr>
<td>Lower Looper (Red)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Chain Stitch Looper (Brown)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper Clutch</td>
<td>&quot;L&quot;</td>
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<tr>
<td>Upper Knife</td>
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<td>Seam Guide Plate</td>
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<tr>
<td>Seam Width Dial</td>
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<tr>
<td>Stitch Length Dial</td>
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<tr>
<td>Presser Foot Pressure</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Differential Feed Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Finger</td>
<td>&quot;N&quot;</td>
</tr>
</tbody>
</table>
- Turn Auto Tension Dial to “I”.
- Turn Stitch Length Dial to “N”.
- Engage Upper Knife.
  The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder clockwise until the knife clicks into a lock position.
- Turn Presser Foot Pressure Dial to "N".
- Turn Differential Feed Dial to "N".
- Turn Seam Width Dial to "N".
- Set Stitch Finger to "N".
Install the Knife Cover.

Engage Upper Looper. Engaging the Upper Looper, causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.

Upper Looper Disengaged

Upper Looper Engaged
• **Engage Spreader.** The Upper Looper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper’s hole. The Spreader is disengaged when the Upper Looper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric’s edge.

  1. Raise the white handle on the Spreader to insert the tip into the eye of the Upper Looper.

• **Thread Lower Looper with regular overlock thread.**

  1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.

  2. Pass thread from back to the front through the thread guide ⑦.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread, firmly pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

9. Place the thread through ⑥, ⑦, and ⑧.
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

Thread Chainstitch Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide 1.
2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button, as illustrated.

3. While holding the thread, firmly pull the thread between the tension disks.

4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½”) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.
6. Place the thread through threading guide ③ and ⑤.

7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6” of thread to the back of the machine.

- **Thread Right Overedge with regular overlock thread.**
  
  1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.
  
  2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.

5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

6. Thread the eye of the Right Overedge Needle ⑨.
Thread Middle Cover Stitch with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread, firmly pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
TRY IT:

• Place two pieces of broadcloth right sides together.

• Align the fabric so that the knife just slightly trims the fabric edge.

• Sew.
Chapter 9:
Five-Thread Safety Stitch Wide
Five-Thread Safety Stitch Wide

This stitch is a combination of a Two-Thread Chainstitch and a Three-Thread Overlock Stitch. It is suitable for woven fabrics and provides a durable seam for heavy weight fabrics such as denim and terrycloth. Using this strong safety stitch eliminates the need to reinforce the seam with a conventional sewing machine straight stitch. The Presser Foot Pressure Adjusting Dial makes it simple to sew on all weights of fabrics. The Five-Thread Safety Stitch can have a width of 2.8mm or 5.6mm, depending on which overlock needle position is chosen.

Set at:

Five-Thread Safety Stitch
Narrow

Five-Thread Safety Stitch
Wide

Middle Cover Needle Thread

Right Overedge Needle

Upper Looper Thread

Lower Looper Thread

Chainsitch Looper
### Needles:

- **Left Overedge Needle** "A" (Blue) - Threaded
- **Overedge Left Needle** "A" (Blue) - Threaded
- **Upper Looper** (Green) - Looper Engaged and Threaded
- **Upper Looper Clutch** - "L"
- **Upper Knife** - Engaged
- **Lower Looper** (Red) - Threaded
- **Chain Stitch Looper** (Brown) - Threaded
- **Lower Looper** (Red) - Threaded
- **Spreader** - Not Used

### ATD:

<table>
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<tr>
<th>ATD:</th>
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<tbody>
<tr>
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<td>Middle Cover Stitch Needle &quot;D&quot; (Orange)</td>
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</tr>
<tr>
<td>Right Cover Stitch Needle &quot;E&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Left Needle &quot;A&quot; (Blue)</td>
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</tr>
<tr>
<td>Overedge Right Needle &quot;B&quot;</td>
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<tr>
<td>Upper Looper (Green)</td>
<td>Looper Engaged and Threaded</td>
</tr>
<tr>
<td>Spreader</td>
<td>Not Used</td>
</tr>
<tr>
<td>Lower Looper (Red)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Chain Stitch Looper (Brown)</td>
<td>Threaded</td>
</tr>
<tr>
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<td>&quot;L&quot;</td>
</tr>
<tr>
<td>Upper Knife</td>
<td>Engaged</td>
</tr>
<tr>
<td>Seam Guide Plate</td>
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<tr>
<td>Seam Width Dial</td>
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<tr>
<td>Stitch Length Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Presser Foot Pressure</td>
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<tr>
<td>Differential Feed Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Finger</td>
<td>&quot;N&quot;</td>
</tr>
</tbody>
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**Five-Thread Safety Stitch Wide page 2**
- Turn Auto Tension Dial to “B”.

- Turn Stitch Length Dial to “N”.

- Engage Upper Knife.
The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder clockwise until the knife clicks into a lock position.
• Turn Presser Foot Pressure Dial to “N”.

• Turn Differential Feed Dial to “N”.

• Turn Seam Width Dial to “N”.

• Set Stitch Finger to “N”.

Five-Thread Safety Stitch Wide page 4
♦ Install the Knife Cover.

♦ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.
   1. Push the clutch button to the left and down to engage.
   2. Turn handwheel.

Five-Thread Safety Stitch Wide page 5
• **Disengage Spreader.** The Upper Looper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded, then the Spreader is used. The Spreader simply plugs-in (or closes) the looper’s hole. The Spreader is disengaged when the Upper Looper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric’s edge.

  1. Lower the white handle on the Spreader to open the eye of the Upper Looper.

• **Thread Upper Looper with regular overlock thread.**

  1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-9.

  2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread, firmly pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.
7. Thread the hole in the Upper Looper from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

- **Thread Lower Looper with regular overlock thread.**
  1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.
  2. Pass thread from back to the front through the thread guide ③.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.
4. While holding the thread, firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ⅛ inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

9. Place the thread through ⑥, ⑦ and ⑧.
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.
Thread Chainstitch Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.

3. While holding the thread, firmly pull the thread between the tension disks.
4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guides ④ and ⑤.

7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with left hand and pull threader lever (C) up into place (D). Gently pull 5-6” of thread to the back of the machine.
Thread Left Overlock needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑥. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Left Overedge Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
• Thread Middle Cover stitch needle with regular overlock thread.
  
  1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.

  2. Pass thread from back to the front through the thread guide ①.

  3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

  4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ➃. Go over the take up lever ➄. Continue by slipping the thread into the middle slot of the thread guides ➅ and ➆.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle ➇.

8. Draw about 4 inches of the thread through the needle eye, under the Presser Foot and then towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
TRY IT:

- Place two pieces of home decorative fabric, right sides together.
- Align the fabric so that the knife just slightly trims the fabric edge.
- Sew.
Chapter 10:
Five-Thread Safety Stitch Narrow
Five-Thread Safety Stitch Narrow

This stitch is a combination of a Two-Thread Chainstitch and a Three-Thread Overlock Stitch. It is suitable for woven fabrics and provides a durable seam for heavy weight fabrics such as denim and terrycloth. Using this strong and stable safety stitch eliminates the need to reinforce the seam with a conventional sewing machine straight stitch. The Pressure Adjusting Dial makes it simple to sew on all weights of fabrics. The Five-Thread Safety Stitch can have a width of 2.8mm or 5.6mm depending on which overlock needle position is chosen.

Hint: Try a wider stitch width (6.5) for thicker fabrics such as Terrycloth.
### Needles:

- **Left Overedge Needle** "A" (Not Threaded)
- **Right Overedge Needle** "B" (Threaded)
- **Cover Stitch Left Needle** "C" (Not Threaded)
- **Cover Stitch Right Needle** "E" (Not Threaded)
- **Middle Cover Stitch Needle** "D" (Orange) (Threaded)

### Set Up:

<table>
<thead>
<tr>
<th>ATD: Auto Tension Dial</th>
<th>&quot;A&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Cover Stitch Needle &quot;C&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Middle Cover Stitch Needle &quot;D&quot; (Orange)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Right Cover Stitch Needle &quot;E&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Left Needle &quot;A&quot;</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Overedge Right Needle &quot;B&quot; (Blue)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper (Green)</td>
<td>Looper Engaged and Threaded</td>
</tr>
<tr>
<td>Spreader</td>
<td>Disengaged</td>
</tr>
<tr>
<td>Lower Looper (Red)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Chain Stitch Looper (Brown)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper Clutch</td>
<td>&quot;L&quot;</td>
</tr>
<tr>
<td>Upper Knife</td>
<td>Engaged</td>
</tr>
<tr>
<td>Seam Guide Plate</td>
<td>Not Installed Use Knife Cover</td>
</tr>
<tr>
<td>Seam Width Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Length Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Presser Foot Pressure</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Differential Feed Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td>Stitch Finger</td>
<td>&quot;N&quot;</td>
</tr>
</tbody>
</table>
• Turn Auto Tension Dial to “A”.

• Turn Stitch Length Dial to “N”.

• Engage Upper Knife.
The knife will not trim the fabric when it is disengaged.
   1. Open Looper Cover.
   2. Pull the movable knife holder (silver screw) to the right as far as it will go.
   3. Turn the holder clockwise until the knife clicks into a lock position.
• Turn Presser Foot Pressure dial to “N”.

• Turn Differential Feed Dial to “N”.

• Turn Seam Width Dial to “N”.

• Set Stitch Finger to “N”.

Five-Thread Safety Stitch Narrow page 4
- **Install the Knife Cover.**

- **Engage Upper Looper.** Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.
  1. Push the clutch button to the left and down to engage.
  2. Turn handwheel.

- **Upper Looper Disengaged**
- **Upper Looper Engaged**
• **Disengage Spreader.** The Upper Looper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper’s hole. The Spreader is disengaged when the Upper Looper is engaged/operative and threaded. The Spreader is usually used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric’s edge.

   1. Lower the white handle on the Spreader to open the eye of the Upper Looper.

   ![Spreader Engaged](image1)
   ![Spreader Disengaged](image2)

• **Thread Upper Looper with regular overlock thread.**
   1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-9.

   2. Pass thread from back to the front through the thread guide ①.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.
7. Thread the hole in the Upper Looper from front to back ⑤. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

- Thread Lower Looper with regular overlock thread.
  1. Raise the Presser Foot to release the Tension disks. Thread the Lower Looper as illustrated 1-10.
  
2. Pass thread from back to the front through the thread guide ⑤.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.
4. While holding the thread firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

9. Place the thread through ⑥, ⑦ and ⑧.
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.
Thread Chainstitch Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.

3. While holding the thread firmly, pull the thread between the tension disks.
4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guide ⑥ and ⑨.

7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6” of thread to the back of the machine.
Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.
5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

6. Thread the eye of the Right Overedge Needle ⑨.

- Thread Middle Cover stitch needle with regular overlock thread.
  1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
  2. Pass thread from back to the front through the thread guide ⑦.
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.

5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide 5. Go over the take up lever 6. Continue by slipping the thread into the middle slot of the thread guides 7 and 8.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle 9.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
• Place two pieces of terrycloth right sides together.

• Align the fabric so that the knife just slightly trims the fabric edge.

• Sew.
Cover Hem Narrow

This professional Cover Hem is a necessary requirement for today’s sewing. The stitch is often seen in ready-to-wear garments. Two needles create parallel rows of topstitching and one looper sews an edge finish on the underneath side. Depending on which needle position is selected, the width can be 5.6mm wide or 2.8mm wide.
**Needles:**

- Left Overedge Needle "A" (Not Threaded)
- Right Overedge Needle "B" (Not Threaded)
- Cover Stitch Left Needle "C" (Orange, Threaded)
- Cover Stitch Right Needle "E" (Not Threaded)
- Cover Stitch Middle Needle/Chain Stitch Needle "D" (Threaded)

### Set-up:

<table>
<thead>
<tr>
<th>ATD:</th>
<th>Auto Tension Dial</th>
<th>&quot;K&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Left Cover Stitch Needle &quot;C&quot; (Orange)</td>
<td>Threaded</td>
</tr>
<tr>
<td></td>
<td>Middle Cover Stitch Needle &quot;D&quot; (Blue)</td>
<td>Threaded</td>
</tr>
<tr>
<td></td>
<td>Right Cover Stitch &quot;E&quot; Needle</td>
<td>Not Threaded</td>
</tr>
<tr>
<td></td>
<td>Overedge Left &quot;A&quot; Needle</td>
<td>Not Threaded</td>
</tr>
<tr>
<td></td>
<td>Overedge Right &quot;B&quot; Needle</td>
<td>Not Threaded</td>
</tr>
<tr>
<td></td>
<td>Upper Looper (Green)</td>
<td>Looper Disengaged and Not Threaded</td>
</tr>
<tr>
<td></td>
<td>Spreader</td>
<td>Not Used</td>
</tr>
<tr>
<td></td>
<td>Lower Looper</td>
<td>Not Threaded</td>
</tr>
<tr>
<td></td>
<td>Chain Stitch Looper (Brown)</td>
<td>Threaded</td>
</tr>
<tr>
<td></td>
<td>Upper Looper Clutch</td>
<td>&quot;C&quot;</td>
</tr>
<tr>
<td></td>
<td>Upper Knife</td>
<td>Non-working Position</td>
</tr>
<tr>
<td></td>
<td>Seam Guide Plate</td>
<td>Installed</td>
</tr>
<tr>
<td></td>
<td>Seam Width Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td></td>
<td>Stitch Length Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td></td>
<td>Presser Foot Pressure</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td></td>
<td>Differential Feed Dial</td>
<td>&quot;N&quot;</td>
</tr>
<tr>
<td></td>
<td>Stitch Finger</td>
<td>&quot;R&quot;</td>
</tr>
</tbody>
</table>
Cover Hem Narrow

- Turn Auto Tension Dial to “K”.
- Turn Stitch Length Dial to “2.5”.
- **Disengage Upper Knife.** The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder counter clockwise until the knife clicks into a lock position.

[Images of upper knife engaged and disengaged]
- Turn Presser Foot Pressure Dial to “N”.
- Turn Differential Feed Dial to “N”.
- Turn Seam Width Dial to “N”.
- Set Stitch Finger to “R”.

Cover Hem Narrow page 4
Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open looper cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.

Disengage Upper Looper. By disengaging the Upper Looper, the looper no longer moves when sewing. It is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.
Thread Chainstitch Looper with a regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.

3. While holding the thread firmly, pull the thread between the tension disks.
4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guides ④ and ⑤.

7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.
Thread Middle Cover needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
• Thread Left Cover Stitch needle with regular thread.
  1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.
  2. Pass thread from back to the front through the thread guide ①.
  3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.
  4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Left Cover Stitch Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Press a 1" hem into a knit fabric.

Lift the Presser Foot to the highest position.

Position the fabric right side up and under the needles.

Align the fabric so that the fabric fold is 1" to the right of the needles. Use markings on cover for positioning and guiding fabric.

Lower the Presser Foot.

Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Cover Hem Stitch it is necessary to have fabric under the needles while sewing.

Sew, using the seam guides for a straight hem and to ensure the fabric’s raw edge is finished.

As the machine sews it will finish the fabric’s raw edge and sew two rows of topstitching.
Chapter 12: Cover Hem (Cover Stitch) Wide
Cover Hem Wide

This professional Cover Hem stitch is a necessary requirement for today’s sewing. The stitch is often seen in ready-to-wear garments. Two needles create parallel rows of top stitching and one looper sew an edge finish on the underneath side. Depending on which needle position is selected the width can be 5.6mm wide or 2.8 mm wide.
### Needle:
- Left Overedge Needle "A" (Orange) Threaded
- Middle Cover Stitch Needle "C" (Orange) Not Threaded
- Right Cover Stitch Needle "E" (Green) Threaded
- Overedge Left Needle "A" (Orange) Threaded
- Overedge Right Needle "B" (Blue) Threaded
- Upper Looper Looper Disengaged and Not Threaded
- Spreader Not Used
- Lower Looper Not Threaded
- Chain Stitch Looper (Brown) Threaded
- Upper Looper Clutch "C"
- Upper Knife Non-working Position
- Seam Guide Plate Installed
- Seam Width Dial "N"
- Stitch Length Dial "N"
- Presser Foot Pressure "N"
- Differential Feed Dial "N"
- Stitch Finger "R"

### Set Up:
- Set ATD: Auto Tension Dial "H"
- Left Cover Stitch Needle "C" (Orange)
- Middle Cover Stitch Needle "D" Not Threaded
- Right Cover Stitch Needle "E" (Green) Threaded
- Overedge Left Needle "A" (Orange) Threaded
- Overedge Right Needle "B" (Blue) Threaded
- Upper Looper Looper Disengaged and Not Threaded
- Spreader Not Used
- Lower Looper Not Threaded
- Chain Stitch Looper (Brown) Threaded
- Upper Looper Clutch "C"
- Upper Knife Non-working Position
- Seam Guide Plate Installed
- Seam Width Dial "N"
- Stitch Length Dial "N"
- Presser Foot Pressure "N"
- Differential Feed Dial "N"
- Stitch Finger "R"

Cover Hem Wide part 1
Double Chain Stitch

- Turn Auto Tension Dial to “H”.

- Turn Stitch Length Dial to “N”.

- **Disengage Upper Knife.** The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder counter clockwise until the knife clicks into a lock position.

---

Upper Knife Engaged  
Upper Knife Disengaged
• Turn Presser Foot Pressure Dial to “N”.

• Turn Differential Feed Dial to “N”.

• Turn Seam Width Dial to “N”.

• Set Stitch Finger to “R”.

Cover Hem Wide page 4
Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open Looper Cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.

Disengage Upper Looper. By disengaging the Upper Looper the looper no longer moves when sewing, it is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.
• Thread Chainstitch Looper with a regular overlock thread.
  1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

  2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.

  3. While holding the thread firmly, pull the thread between the tension disks.
4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guide ⑤ and ⑥.

7. Continue threading guides ⑦, ⑧, and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6” of thread to the back of the machine.
Thread Right Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide 5. Go over the take up lever 6. Continue by slipping the thread into the middle slot of the thread guides 7 and 8.

6. Before threading the eye of the needle, make sure the thread is in **front** of the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Right Cover Stitch Needle 9.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Thread Left Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the front slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slots of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Left Cover Stitch Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Press a 1” hem into a knit fabric.

Lift the Presser Foot to the highest position.

Position the fabric right side up and under the needles.

Align the fabric so that that the fabric fold is 1” to the right of the needles.

Lower the Presser Foot.

Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Cover Hem Stitch it is necessary to have fabric under the needles while sewing. Sew off onto a scrap fabric.

Sew using the seam guides for a straight hem and to ensure the fabric’s raw edge is finished.

As the machine sews it will finish the fabric’s raw edge and sew three rows of topstitching.
Chapter 13: Triple Cover Hem Stitch
**Triple Cover Hem**

This innovative stitch provides a very wide 5.6 mm professional and creative triple topstitch to sewing projects. Three needles create parallel rows of topstitching and one looper sews an edge finish on the underneath side. This is ideal for heavier fabrics traditionally used in home decorating. It also adds a unique accent for garment construction. In addition to sewing on woven fabrics, the Triple Cover Hem makes a beautiful topstitch and a strong hem on stretch fabrics. This stitch emulates hem finishing as seen on ready-to-wear garments.

![Triple Cover Hem Page 1](image-url)
**Needles:**

- Left Overedge Needle “A”
- Right Overedge Needle “B”
- Cover Stitch Left Needle “C”
- Cover Stitch Right Needle “E”
- Cover Stitch Middle Needle/Chain Stitch Needle “D”

<table>
<thead>
<tr>
<th>ATD:</th>
<th>Set at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Tension Dial</td>
<td>“J”</td>
</tr>
<tr>
<td>Left Cover Stitch Needle “C” (Orange)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Middle Cover Stitch Needle “D” (Blue)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Right Cover Stitch Needle “E” (Green)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper</td>
<td>Looper Disengaged and Not Threaded</td>
</tr>
<tr>
<td>Spreader</td>
<td>Not Used</td>
</tr>
<tr>
<td>Lower Looper</td>
<td>Not Threaded</td>
</tr>
<tr>
<td>Chain Stitch Looper (Brown)</td>
<td>Threaded</td>
</tr>
<tr>
<td>Upper Looper Clutch</td>
<td>“C”</td>
</tr>
<tr>
<td>Upper Knife</td>
<td>Non-working Position</td>
</tr>
<tr>
<td>Seam Guide Plate</td>
<td>Installed</td>
</tr>
<tr>
<td>Seam Width Dial</td>
<td>“N”</td>
</tr>
<tr>
<td>Stitch Length Dial</td>
<td>“N”</td>
</tr>
<tr>
<td>Presser Foot Pressure</td>
<td>“N”</td>
</tr>
<tr>
<td>Differential Feed Dial</td>
<td>“N”</td>
</tr>
<tr>
<td>Stitch Finger</td>
<td>“R”</td>
</tr>
</tbody>
</table>

Triple Cover Hem page 2
- Turn Auto Tension Dial to “J”.

- Turn Stitch Length Dial to “N”.

- **Disengage Upper Knife.** The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder counter clockwise until the knife clicks into a lock position.
- Turn Presser Foot Pressure Dial to “N”.

- Turn Differential Feed Dial to “N”.

- Turn Seam Width Dial to “N”.

- Set Stitch Finger to “R”.
**Install the Seam Guide Plate.** The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open Looper Cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.

**Disengage Upper Looper.** By disengaging the Upper Looper the looper no longer moves when sewing. It is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.
Thread Chainstitch Looper with a regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.

3. While holding the thread firmly, pull the thread between the tension disks.
4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guides 4 and 5.

7. Continue threading guides 6, 7, 8 and 9.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6” of thread to the back of the machine.
Thread Right Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Right Cover Stitch Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Thread Middle Cover needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread, firmly pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Thread Left Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.

6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.

7. Thread the eye of the Left Cover Stitch Needle ⑨.

8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

9. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Press a 3" hem into a woven home decorator fabric.

Lift the Presser Foot to the highest position.

Position the fabric right side up and under the needles.

Align the fabric so that the fabric fold is 1" to the right of the needles.

Lower the Presser Foot.

Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Triple Hem Stitch it is necessary to have fabric under the needles while sewing.

Sew using the seam guides for a straight hem and to ensure the fabric’s raw edge is finished.

As the machine sews it will finish the fabric's raw edge and sew three rows of topstitching.
Chapter 14: Three-Thread Rolled Hem
Three-Thread Rolled Hem

The Rolled Hem Stitch is used to finish edges of scarves, ruffles, table linens, and some garments. It is suitable for lightweight to medium weight fabrics, such as sheers, silkies and broadcloth. Beautiful pintucks can be achieved with the rolled hem. They can enhance a yoke, heirloom sewing, wearable art and even home decorating projects. Note: Rolled hemming can only be performed with the Right Overedge needle all other needles must be removed.
### Needles:

- **Left Overedge Needle** "A" — Not Threaded
- **Middle Cover Stitch Needle** "C" — Not Threaded
- **Right Overedge Needle** "B" — Threaded
- **Overedge Left Needle** "A" — Not Threaded
- **Overedge Right Needle** "B" (Blue) — Threaded
- **Upper Looper (Green)** — Looper Engaged and Threaded
- **Upper Looper Clutch** — "L"
- **Upper Knife** — Engaged
- **Chain Stitch Looper (Brown)** — Not Threaded
- **Spreader** — Not Used
- **Lower Looper (Red)** — Threaded
- **Seam Guide Plate** — Not Installed
- **Use Knife Cover**
- **Seam Width Dial** — "N"
- **Stitch Length Dial** — "1"
- **Presser Foot Pressure** — "N"
- **Differential Feed Dial** — "N"
- **Stitch Finger** — "R"

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**Auto Tension Dial (ATD):** "C"

**Right Overedge Needle** "B"

**Left Cover Stitch Needle** "C"

**Middle Cover Stitch Needle** "D"

**Right Cover Stitch Needle** "E"

**Overedge Left Needle** "A"

**Overedge Right Needle** "B" (Blue)

**Upper Looper (Green)**

**Spreader**

**Lower Looper (Red)**

**Chain Stitch Looper (Brown)**

**Upper Looper Clutch** — "L"

**Upper Knife** — Engaged

**Seam Guide Plate** — Not Installed

**Use Knife Cover**

**Seam Width Dial** — "N"

**Stitch Length Dial** — "1"

**Presser Foot Pressure** — "N"

**Differential Feed Dial** — "N"

**Stitch Finger** — "R"
• Turn Auto Tension Dial to “C”.

• Turn Stitch Length Dial to “1”.

• **Engage Upper Knife.** The knife will not trim the fabric when it is disengaged.
  1. Open Looper Cover.
  2. Pull the movable knife holder (silver screw) to the right as far as it will go.
  3. Turn the holder clockwise until the knife clicks into a lock position.

[Diagram of knife engagement]

Upper Knife Disengaged  Upper Knife Engaged
• Turn Presser Foot Pressure Dial to “N”.

• Turn Differential Feed Dial to “N”.

• Turn Seam Width Dial to “N”.

• Set Stitch Finger to “R”.
Install the Knife Cover.

Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.
1. Push the clutch button to the left and down to engage.
2. Turn handwheel.
Disengage Spreader. The Upper Looper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper’s hole. The Spreader is disengaged when the Upper Looper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric’s edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looper.

Thread Upper Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

Spreader Engaged

Spreader Disengaged
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.
7. Thread the hole in the Upper Looper from front to back ②. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

- Thread Lower Looper with regular overlock thread.
  1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.

  2. Pass thread from back to the front through the thread guide ③.

  3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.
4. While holding the thread firmly, pull the thread between the tension disks.

5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

9. Place the thread through ⑥, ⑦ and ⑧.
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.
Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

2. Pass thread from back to the front through the thread guide ①.

3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

4. While holding the thread firmly, pull the thread between the tension disks.
5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide 5. Go over the take up lever 6. Continue by slipping the thread into the right slots of the thread guides 7 and 8.

8. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

9. Draw about 4 inches of the thread through the needle eye towards the back of the machine.

10. Place the thread to the back, under the Presser Foot. Lower foot and sew.
Align a piece of lightweight fabric so that the fabric’s edge is being slightly trimmed by the knife.

Sew.
Chapter 15:
Additional Presser Feet
BLIND HEM FOOT

The Blind Hem Foot is used for hemming skirts, pants and other sewing projects in one easy operation. It is recommended for use on stretch or textured fabrics.

Machine Preparation
- Differential Feed: Set to “N”
- Needles: Use the right needle only
- Upper Knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Blind Hem Foot

Sewing Instructions
- Fold fabric as illustrated, and insert it under the presser foot
- Line up the edge of the fold with the guide plate (2)
- Adjust the positioning of the fold of the fabric with the adjustment screw (1)
- The fold of the fabric must always be in line with the left needle
- Begin to sew, keeping the fold of the fabric along guide plate (2)
CORDING FOOT

The Cording Foot is used for sewing piping (cording) between two layers of fabric in one easy operation.

Machine Preparation
- Differential Feed: Set to “N”
- Needles: You may use both the right and left needle, or left only
- Upper Knife: Engaged
- Stitch Length: Set to “N”
- Foot: Attach (snap-on) Cording Foot

Sewing Instructions
- Raise the presser foot
- Set the needle(s) at the highest position
- Layer the piping between the two layers of fabric so that the piped edge lays towards the inside of the fabric
- Line up the edge of the fabric along the upper knife
- The piping (cording) must line up with the groove in the presser foot (guide 1)
- Lower the presser foot and begin to sew

Note: Make sure the piping follows the groove of the Cording Foot as you sew.
ELASTIC FOOT

The Elastic Foot is used for inserting elastic into a seam. It can be used for swimwear, lingerie and other sewing projects.

Machine Preparation
- Differential Feed: Set to “N”
- Needles: Use both the right & left needle for wider elastic, right needle for narrow elastic
- Upper Knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) elastic foot

Sewing Instructions
- Set the needles at the highest position
- Raise the presser foot
- Loosen screw (2), which will allow the brake (1) to be raised
- Insert the elastic tape (3) into the foot under the brake and run it through to the back of the foot
- Tighten screw (2): the more you tighten, the more pressure will be added to the brake (1), causing the elastic to stretch even more
- Lay the seam under the presser foot, lining up the fabric to sew a 5/8” seam
- Lower the presser foot and begin to sew
- When seam is complete, continue to sew over the elastic for approximately 1 to 2 inches. Cut elastic and remove from machine.
BEADING FOOT
The Beading Foot is used for sewing on beads, sequins, pearls and thick cord.

Machine Preparation
- Differential Feed: Set to “N”
- Needles: Use left needle for large beads, or right needle for smaller beads
- Upper Knife: You may choose to work with or without the upper knife (If engaging the knife, be careful not to cut the beads as you sew)
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Beading Foot

Sewing Instructions
- Pull the beads along guides 1 and 2 through the back of the foot
- Raise the presser foot and place fabric under the foot, with the edge of the fabric lined up with the edge of the Beading Foot
- Lower presser foot and begin sewing, slowly at first to make sure the beads are well positioned

Note: The needle should penetrate the fabric at 1.5mm away from the edge.
TAPING FOOT
The Taping Foot is used for inserting a tape into seams that will stretch easily. Inserting the tape will stabilize the seam.

Machine Preparation
- Differential Feed: Set to “N”
- Needles: Use both the right and left needle
- Upper Knife: Engaged
- Stitch Length: Set to “N”
- Foot: Attach (snap-on) Taping Foot

Sewing Instructions
- Set the needles at the highest position
- Raise the presser foot
- Insert the tape into the guide (1), and pull it through to the back of the foot
- You may adjust the position of the tape in relationship to the needles by turning the adjusting screw (3)
- Lay the seam under the presser foot, lining up the fabric to sew a 5/8” seam
- Lower the presser foot and begin to sew
SHIRRING FOOT
The Shirring Foot is used for shirring or gathering. Use it on home decorating accessories or clothing. This foot provides best results when used with lightweight and sheer fabrics.

Machine Preparation
- Differential Feed: Set to the maximum (highest number) for gathering
- Needles: You may use either the left or right, or both needles
- Upper knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Shirring Foot

Sewing Instructions
- Raise the presser foot
- Set the needle(s) at the highest position
- Place bottom layer of fabric under the presser foot (1). This is the fabric that will be gathered.
- Place the top layer of fabric (2) into opening (3) located at the front of the Shirring Foot, making sure edges of both the top and bottom layer of fabrics line up
- Lower the presser foot and begin to sew