

Rational Dress Society Instructional Video Instructions

Defining terms:

Lengthwise Grain: On woven fabrics, the grain line is the warp, or the longwise threads which are stretched on the loom that run parallel to the selvedge edge.

Grain Line: The grainline on the RDS pattern is marked with a single line with an arrow on either end pointing up or down. These lines indicate the grain or direction that the piece is to be cut.

Drill holes: Drill holes are interior markings on the pattern and are indicated by a circle with a t, or x, in the center. They are used to indicate the ends of tucks, darts, and pocket alignment in JUMPSUIT.

Notches: Notches are the U shaped markings that are found throughout the pattern. Some notches indicate seam allowance widths, while others will help you line up pattern pieces while sewing.

Selvedge: Selvedge is the self-finished edge of fabric. This narrow border keeps the fabric from unraveling or fraying. Often it has an edge that resembles tiny fringe, though just as frequently, a cleanly finished line will be found.

Fusible interfacing: Fusible interfacing is a material that is used to reinforce, strengthen, and stabilize certain pieces in a garment. While the use of fusible interfacing is optional, the Rational Dress Society recommends a light to medium weight non-woven or tricot fusible interfacing.

Backstitch: Backstitching is a short forward then backwards stitch that typically happens at the start as well as the end of a seam. This reinforcing stitch gives added strength to secure the ends of the seams.

Cutting:

The Rational Dress Society downloadable pattern file is designed to serve as a pre-made template, ready for layout and cutting. To use this template as is you will need fabric that is at least 54" wide, not including the selvedge edge which may vary in width. If your fabric is less than 54" wide skip ahead to the next section for cutting instructions if using a narrow fabric.

Step 1: Once your pattern is printed cut along the outermost rectangle to remove any excess paper.

Step 2: Fold your fabric in half along the lengthwise grain matching selvedge edge to selvedge edge.

Step 3: Place the paper template on top your fabric, matching the folded edge of the fabric with the side of the paper marked "folded edge."

Step 4: Place pins throughout the template pinning together both layers of fabric as well as the paper.

Step 5: Cut around the perimeter of each piece.

Step 6: Leaving the pins in place, you will next need to snip each of the notches, taking care to not snip beyond the end of the U shape!

Step 7: Mark all interior drill holes. Using a pin to bring together both layers of fabric and the pattern, mark the center of each drill hole with chalk, wax or other removable, nonpermanent tool. A tailor's tack may also be used. *These interior markings will be located on the Pant Back, Bodice Back, and if your pattern contains bust darts, then you will find a mark on the Bodice Front.*

Step 8: Cut fusible interfacing pieces, if using. Pattern pieces that use fusible will be marked with the direction "Cut 2 Fusible" or "Cut 1 Fusible". These pieces are: the Collar, Fly, Fly Facing, Front Pocket Facing, and Front Pocket Backing. To cut the fusible, lay the material down with the glue side facing up, then place your patterns down and cut around the perimeter of each piece and notch.

Step 9: Cut the Front Pocket Bag if using a separate pocketing material. If you are not using a pocketing material, then the Front Pocket Bag may be cut alongside your other pattern pieces. *Pocketing is used to reduce bulk in cases of thicker materials – You will find an example of pocketing on any pair of blue jeans.*

Cutting instructions for narrow fabric:

If your fabric is less than 54" wide you will need to cut each pattern piece individually from the paper and create a layout on your fabric, taking care to place your pieces so that there is minimal waste. The quantity instructions and grainlines are all marked on each pattern piece for ease of use.

To find the grainline markings look for the single line with two arrows at either end. These lines indicate the direction, or grain, of the fabric. When creating a layout on your fabric these lines should run parallel to the selvedge edge of your fabric.

To ensure that they are parallel measure the distance from the top arrow point to the edge of the fabric, then match that same distance with the bottom arrow. When the top and bottom arrows are equidistant from the edge of your fabric then the pattern piece is correctly positioned.

Part 1 Top:

For this video we will be assembling the fitted version of JUMPSUIT, featuring bust darts for the accommodation of breasts.

Step 1: Sew Bust Dart

Here we have the front bodice pieces. Locate the mark you made on the bodice front when cutting out your JUMPSUIT. This mark is the vanishing point of your dart, which is simply the point where you will stop sewing the bust dart. You will have a right and left front, so be sure to follow the steps for each side.

Select one bodice front piece to begin. Each dart will have three markings; two notches at the edge of the fabric and the vanishing point, marked on the interior of the piece. Working with right sides together match the two notches so that they stack directly on top of one another. Here, the vanishing point is marked with a pin. Starting from the cut edge of the fabric stitch your dart from the notches to the vanishing point in a straight line, taking care to backstitch at the beginning of your seam. Once you reach the vanishing point of your dart remove the piece from the sewing machine leaving excess thread, or, a thread tail. Take the thread tail and forming a loop make a knot, this is called a water knot. Tie two knots at the end of your vanishing point. Clip the excess thread leaving about a half of an inch of length beyond the two knots. Snip the threads at the start of your dart so they are flush with the edge of your seam. This is your first dart. See how the contour of the piece is already changing.

*****Unfitted Front Tuck*****

The unfitted version of JUMPSUIT has a front tuck instead of the bust dart that is found in the fitted version of the RDS monogarment. To complete the tuck locate the two notches on the bottom hem of the top, located near the side seam. Stack the notches on top of one another, then fold the excess fin of material so that it folds toward the center front of the top. The folded edge of the tuck will face the side seam. Pin the layers together then back tack to secure all three layers in place.

Step 2: Topstitch dart

Notice on the back, or wrong side, of your fabric that there will be a fin of excess material. When you push this fin to one side you will see that there is a gap, when you push the excess to the opposite side you will see that the fin is flush with the edge of the fabric. The flush position is the correct position. Stitching from the right side, or face, of the fabric stitch along the edge of the dart so that you are joining together both the dart excess and the face of the material. When you get to the vanishing point of the dart place the needle in the down position, then lift the presser foot. This will allow you to freely pivot the material. With the needle still in the down position rotate the fabric creating a 45 degree angle from your stitch line. Lower the presser foot and stitch for three to four stitches. Again, with the needle in the down position pivot the fabric so that you are now stitching back up the dart. Use the edge of the presser foot as a guide to keep the stitching even. Snip the excess threads.

Step 3: Sew Back Tuck

Select the bodice back piece. On the hem of the piece locate the notches for the back tucks. There will be two back tucks with a total of four notches, and four vanishing points or ending points. These will be located near the right and left sides of the piece. Working with one tuck at a time align the notches so that they stack directly on top of one another, similarly, stack the vanishing points together and pin. Starting from the cut edge of the fabric stitch from the notches to the end of the vanishing point. Unlike the bust dart, the back tuck will be back-stitched at both the start and end of the tuck.

Step 4: Topstitch Back Tuck

Now that the tucks have been sewn you can see the added ease they create, they will allow for greater movement through the shoulders. Flipping the piece to the back, you can see the excess fin of fabric created from sewing the tuck. Turn the fin so that the excess fabric points towards the center back. Begin your topstitch at the bottom edge of the back bodice stitching on the right side of the fabric. Similar to the topstitching of the bust dart, you will be stitching the excess fabric from the tuck to the face of the bodice. You will be stitching together a total of three layers of fabric. When you reach the end of the tuck put the needle of the machine in the down position. With the needle still in the down position lift the presser foot and pivot your fabric creating a 45 degree angle. Sew three to four stitches at this angle and again place your needle in the down position. Pivot your fabric once more so that you are now stitching down the opposite side of the tuck, parallel to the first row of stitching.

Step 5: Sew Side Seams

Lay the back bodice flat on your workspace with the right side facing up. Then take the two front bodice pieces and, taking care to butterfly, or mirror your pieces lay them over the back positioning right sides together. Stitch together the side seam following the seam allowance markings or notches, taking care to backstitch both the beginning and end of your seam. The seam allowance for the side seams is $\frac{1}{2}$ ". Repeat for both the right and left sides.

Step 6: Serge Side Seams

This step recommends the use of a serger. A serger, sometimes called an overlock machine, is a machine that cuts and finishes the edges of fabric through a series of looped stitches. The use of an overlock machine is not required to complete JUMPSUIT. If you are not using a serger you may skip ahead to the next step. You will be serging a total of four seams here, the two front edges and the right and left side seams. Starting with the right front bodice, begin your serge at the neck and continue down to the hem. Next serge together your right side seam. You will be serging together two layers of fabric here beginning at the underarm intersection. The excess seam allowance should be positioned so that the excess fabric sweeps to the back. Repeat steps for the left bodice, but this time begin your serge at the hem and end at the neck.

Step 7: Butterfly and position sleeve pieces.

There are two sleeve components that make up a complete sleeve, a front sleeve and a back sleeve. To differentiate the front and back sleeve components look for the notches found on the long curved edge of each piece. Two notches indicate the back, while a single notch indicates the front. The sleeve shapes differ slightly and it is important to align the notches properly to ensure correct fit. Starting with the front, open the pattern up butterflying, or mirroring, the pieces with right sides facing up. Then, repeat for the back ensuring that right sides are placed together.

Step 8: Sew interior and exterior seams

Stitch together the underarm seam following the seam allowance notches marked from your pattern. The seam allowance for both sleeve seams is $\frac{1}{2}$ ". Stitch together the outer seam. When stitching the outer seam line up your notches and begin your seam where the notches meet, *not* where the cut edges of your fabric meet. Aligning the notches ensures for a smooth neckline when the outer seam is completed. Repeat for both the right and left sleeves.

Step 9: Serge upper and under sleeve seams

Working one sleeve at a time, serge together the interior and exterior seams. You will be serging the two layers together. Again, find the notches located on the long curved side of the sleeve pieces. Serge both the interior and exterior seams with the front sleeve facing up. This ensures that the face of the serge is showing. Repeat for opposite sleeve.

Step 10: Iron all seams to back

To prepare the sleeve for top stitching you will need to press your inner and outer seam allowances to the back of the sleeve. To find the back, locate the double notches, then position your seam allowance excess so that it folds to the back of the sleeve. Working

carefully press the seams down with the iron. It may be necessary to reposition the sleeve in order to cleanly press. Repeat for both the right and left sides. Next press the bodice seams so that they too fold to the back of the garment.

Step 11: Prep Sleeve, fold and iron twice.

Take the sleeve, and working with the wrong side facing up, turn the lower edge of the sleeve up $\frac{1}{2}$ " and press around the entire circumference of the sleeve opening. You will need to reposition the sleeve several times as you iron. Next, turn the fabric again making a second fold, this time at a width of 1". Press along the entire sleeve opening repositioning the sleeve as needed. When complete there will no longer be any visible raw edges of the fabric.

Step 12: Two rows of topstitching on sleeve outseam

Locate the outseam of the sleeve, this will be the longer of your two sleeve seams. Place the fabric right side up into the sewing machine and stitch the first row of topstitching about $\frac{1}{16}$ th to $\frac{1}{8}$ th of an inch from your seam. Your stitch should be next to, not on top of your initial seam. You will be stitching together the face of the fabric and the seam allowance for a total of three layers. This top stitching gives the garment added strength. Once the first row of stitching is complete, run a second row of topstitching next to the first with a spacing of approximately $\frac{1}{4}$ ". Use the edge of the presser foot as a guide to help you maintain even spacing. Snip excess threads and repeat for the other sleeve.

Step 13: sew hem of sleeve, two rows of topstitching

Take the sleeve and put it into the sewing machine with the folded edge of the hem facing up. Stitch the hem of the sleeve about $\frac{1}{16}$ " to $\frac{1}{8}$ " away from the interior folded edge. Since the backstitch from the hem will be seen you want to ensure that your clipped threads are tidy. To ensure this tidiness, first clip the threads from the face of the sleeve, then gently tug on the two remaining threads on the back of the sleeve. By gently tugging the back threads the small tail from the face of the sleeve will be pulled to the interior of the sleeve resulting in a clean, thread free exterior. Complete the topstitching with a second row of stitching $\frac{1}{4}$ " away from the first row, again using the edge of the presser foot as a guide to help maintain even spacing between the rows of stitching.

Step 14: Sew sleeve into body of garment

You will need both sleeves as well as the bodice for this step. Working on one sleeve at a time locate the sleeve notches, two notches indicates the back, while one indicates the front. Next locate the corresponding notches located on the bodice, these notches will mirror the notches found on the sleeve. Position the sleeve and the bodice together so that the notches from the bodice and the sleeve match. Align your pieces so that the right sides are sewn together. Match your seam allowance notches together and stitch at $\frac{1}{2}$ ". Reposition your fabric as you sew to keep the area around the needle uncluttered, pin if necessary. The front and back notches along with the underarm seam should all line up exactly.

Step 15: Serge together body and sleeve seams

Next, you will be serging together the interior armhole seams. This seam is a simple U shape. Serge the underarm seam with the bodice facing up as you serge. This will insure that the correct side of the serge faces up. Repeat for the opposite side.

Step 16: Iron sleeve body seam allowance

To prepare for the last rows of topstitching the underarm seams must be pressed flat against the bodice. Working from the face of the garment press the underarm seam so that the excess seam allowance folds toward the sleeve.

Step 17: Single row of topstitching at sleeve body intersection

For this last step before the bodice is complete the armhole seams must be topstitched. Stitch with the right side of the bodice facing up, the topstitch should be approximately 1/16" to 1/8" away from the sleeve/body seam. You will be stitching together three layers of fabric here - the face of the bodice and the seam allowance excess.

Part 2 Bottom:

Step 1: Iron Pocket facing and pocket backing to fusible

Fusible interfacing is a material that is used to reinforce, strengthen, and stabilize certain pieces in a garment. While the use of fusible interfacing is optional, the Rational Dress Society recommends a light to medium weight non-woven or tricot fusible interfacing. To attach the fusible interfacing pieces to the pocket backing and front pocket facing, first position each of the cut pieces onto your ironing board. You will have two sets of each, one set in your fabric and one in the fusible interfacing. Starting with the pocket backing open and butterfly your fabric pieces placing them on the surface of the ironing board with the right sides facing down. If your fabric does not have a discernable right or wrong side make sure that your pieces are mirrored so that you will have a left front and a right front pocket backing. Fusible interfacing, sometimes simply called fusible will have a glue side and a right side. The glue side of the fusible will have a rougher texture similar to sandpaper, while the right side will be smooth. Position the fusible piece glue side facing down on top of the cut fabric piece. The glue side will adhere to the wrong side of your fabric. Again locate the glue side of your fusible and position the piece with the glue side facing down on top of the pocket backing. Repeat these steps for the front pocket facing, mirroring your pieces and placing them on your work surface with the wrong side facing down. Smooth any wrinkles or buckles in your fusible as the fabric and fusible pieces

should be identical. Once your pieces are aligned take your iron and press together according to the recommendations listed by the manufacturer.

Step 2: Serge edge of pocket backing and front pocket facing

Open your pocket backing pieces and locate the long curved edge of the piece. Next locate the outer edge of the pocket facing, this edge will be the longer of the two curved edges. Working with the right side facing up serge your pieces one at a time. To save time and thread when serging together multiple pieces serge each piece sequentially without trimming your threads. When you are finished you will have a chain, to disconnect the pieces trim the threads at the start and finish of each seam. Once this step is complete you will have four serged edges.

Step 3: Sew both pocket backing and pocket facing onto pocket bag

Hold the pocket bag in front of you so that the curved edge of the pocket is at the top, echoing the position of the finished sewn pocket. Fold the pocket in half using the notch at the top of the piece to guide you to the halfway point. When folded you can see how the pocket will be formed, with the curved edge as the point where your hand will enter into the pocket, sometimes referred to as the pocket or hand entry. Butterfly the pocket bag pieces so that you have a right and left side. Beginning with the pocket backing align the piece on your pocket bag with the right side facing up, matching the upper corner of the pocket backing to the upper corner of the pocket bag, pinning into position as needed. Both pieces will line up and stack exactly along the waist and side seams. Begin stitching at the upper corner of the pocket bag, and stitch around the entire perimeter of the pocket backing at $\frac{1}{4}$ ". A pocket backing is a patch of material that is needed when a lighter weight fabric is used in creating the pocket. You will find this type of front pocket on most blue jeans and many trousers. By using a lighter material for the pocket you are able to reduce unnecessary bulk.

Repeat for the opposite side.

Now that both pocket backings have been sewn, butterfly your pieces once more and position the pocket facing on top of the curved edge of the pocket bag with the right side facing up. Pin as needed. Like the pocket backing you will stitch around the entire perimeter of the pocket facing at $\frac{1}{4}$ ", pivoting the material as you reach each corner. Repeat for the other side.

Step 4: Close the pocket bag

Now that the facing and backing are stitched into place, fold the pocket bag in half with the right sides together. To ensure that the pocket is folded in half locate the notch at both the top and bottom of the pocket bag, these notches indicate the fold line for the pocket bag. Stitch the pocket closed along the bottom edge at $\frac{1}{2}$ " taking care to backstitch at the beginning and end of the stitch line. Repeat for other side.

Step 5: Sew pocket bag to pant front

Locate your pant front. The pant front will have two sloping curves, while the pant back will have only one. The shorter of these curves is for your pocket while the longer is for the crotch seam. Select one pant leg then fold and set aside the other. The pocket opening on the pant front will be identical to the opening on your completed pocket bag. Working with right sides together, place the pocket bag on top of the pant front, pinning as needed. Starting at the top of the waist stitch along the pocket opening at $\frac{1}{4}$ ". You will notice that you now have two rows of stitching that are nearly stacked on top of one another, the first is from stitching the facing to the pocket while the second is from stitching the pocket to the pant front. While there are now two rows of stitching neither row will be seen when the pocket is completed. Flipping the pocket to the back of the pant front you should now see how the pocket will be formed. Repeat for the other side.

Step 6: Iron pocket seams open and back

In preparation for the next sewing step you will need to first press open then press back the pocket entry seam. Locate the pocket entry seam on your pant front and lay the fabric flat on your workspace. This seam will have a $\frac{1}{4}$ " seam allowance that will be pressed open. Starting from the waistline gently push apart the two layers of fabric with your fingertips then, using the nose of the iron push the seams carefully to press the fabric open. Because the seam is curved it will not lay entirely flat on your work surface so you will need to reposition your material several times as you work around the curve. Once your seams have been pressed open flip the pocket to the back. You can see how nicely the pieces are beginning to fold already. Place the pant front on the ironing board so that the wrong side is facing down. Gently press the pocket entry seam again, this time with all layers together. When finished you should have a clean smooth edge along the pocket entry.

Repeat for the other side.

Step 7: Topstitch two rows along pocket opening

For this step you will be creating two rows of topstitching along the pocket entry. Position the pant leg on your work surface so that it is out of the way but not hanging off of the table and creating a drag. Begin your stitch at either the waist or side seam and stitch approximately $\frac{1}{16}$ " to $\frac{1}{8}$ " away from the folded edge. This will be your first row of topstitching. Use the inside edge of the presser foot as a guide to help keep your stitching even. For the second row of topstitching move to the inside of the pant and stitch $\frac{1}{4}$ " away from your first row of topstitching, this time using the outside edge of the presser foot as a guide. You will need to gently guide the fabric along the curved edge repositioning the material as needed so as to keep the area around the needle uncluttered.

Repeat for other side.

Step 8: Secure the pocket bag along the top of pant

Next you will be completing the front pocket by stitching together the pocket bag and pant front along the waist and side seams. First you will need to locate the center notch of your pocket bag along the waist seam. This notch indicates where the pocket will fold and will allow you to correctly position the pocket along the waist seam. Once your pocket is folded smooth the fabric along the waist seam until the edge of the pocket opening lines up with a corresponding notch on the pocket backing. The center notch on your pocket and the notch on the pocket backing will ensure that your pieces are all aligned correctly. Pin if needed through all three layers of material.

Stitch along the top of the pant securing all three layers together at $\frac{1}{4}$ ".

Repeat for the other side.

Step 9: Serge outseams, pocket hem & crotch seam

Before serging the outseam of the pant you will first need to serge the bottom edge of the front pocket, then move to the crotch seam, and lastly the outseam. Serge along the bottom of the pocket and trim your threads. Next serge along the crotch seam adjusting your fabric as need to keep the area around the needle free from any fabric that may start to buckle or bunch as you move around the curve. Lastly the outseam will be finished. As you near the pocket you will need to make sure that your pocket bag and pant front are aligned, at this point you will be serging together three layers of fabric. Located on the side of the pocket bag you will find another notch. This side notch indicates where the front pocket seam will line up with the pocket backing. Secure all three layers together with either your fingertips or pins. If using pins be sure that the point of the pin is at least 1" away from the edge of your seam to avoid breaking a pin or needle with the serger blade.

Step 11: sew together crotch seam from crotch point to notch

In this step we will be sewing together a portion of the crotch seam leaving the majority of the seam open to accommodate the fly in later steps. Towards the bottom third of the crotch seam you will find a single notch. This notch indicates the opening point for the fly, it also indicates where you will stop stitching during this step. Starting from the crotch stitch at $\frac{1}{2}$ " until you reach the front notch. Now that the pant fronts are sewn together you can see how the front will open.

Step 12: Topstitch from crotch point to notch point.

Holding the pant at the crotch seam with the right side facing you push the fin of excess seam allowance to the left side of the pant. Once the seam allowance is pushed to the side, with the right side still facing up begin your topstitch line at the crotch point and stitch at $\frac{1}{16}$ " until you reach the notch point. You will be stitching together three layers

of fabric here, two layers of seam allowance and one layer of the outside face or self fabric. It is important that your seam allowance be pushed to the left side in order for the fly to open on the correct side in later steps.

Step 13: Stitch together back crotch seam

Locate the back pant pieces. The pant back can be identified by the single long sloping seam toward toward the top of the piece, this is the back crotch seam. Keeping right sides together sew together both pant backs at a $\frac{1}{2}$ " seam allowance.

Step 14: Serge crotch seam and outseams

Starting from the waist seam serge together both layers of the back crotch seam for the entire length of the seam. Next serge down the outseams of both the right and left sides.

Step 15: Topstitch two rows along the back crotch seam

Hold the pant back so that the waistline is on top with the right side facing you. Next, push the fin of excess seam allowance to the left so that the seam allowance is entirely rolled onto the left side of the pant. Putting your fabric into the machine right side facing up, stitch your first line of topstitching $\frac{1}{16}$ " away from the seam line. You will be sewing together three layers of fabric here, two layers of seam allowance and one layer from the self or face of the pant. Reposition your fabric as needed to allow the material to move easily around the presser foot and needle. Next you will begin your second row of topstitching. Use the outside edge of the presser foot as a guide sew your second row of topstitching $\frac{1}{4}$ " away from the first line. These rows of topstitching serve to reinforce your seams with the additional benefit of securing your seam allowances in place.

Step 16: Iron back pockets and turn over edges

The Rational Dress Society pattern for JUMPSUIT has two back pockets. Working with one piece at a time place your back pocket on the ironing board with the right side facing down. Turn the upper edge over $\frac{1}{2}$ " and press. Using steam while ironing will help to create a more permanent fold, making for easier sewing. Next move to the side of the pocket, this time you will be folding over $\frac{1}{4}$ ", turn and press. Moving around the perimeter of the pocket you will next fold the bottom edges. Like the sides of the pocket these will be pressed at $\frac{1}{4}$ ". Lastly, fold the top edge of the pocket a second time. This is a double fold hem and is the same hem that we used for the sleeves. Turn the top edge so that your hem measures $\frac{3}{4}$ " and press. You can see now that the right side of the pocket no longer has any raw cut edges visible.

Repeat for the other side.

Step 17: Topstitching the top opening of pocket

In this step you will be hemming the back pocket with two rows of stitching. Working with the wrong side up you will be able to see the folded edge of your hem. The first row of

topstitching will run along the inside folded edge. Sew this first line at a distance of 1/16" from the turned edge. Trim any excess threads. Next stitch the second row 1/4" away from the first row of stitching.

Repeat for the other side.

Step 18: Topstitch the back pockets onto the pant right and left

On your pant back there will be four markings on the interior of the piece. These markings, also called drill holes, indicate the back pocket alignment. Here these have been marked with pins. Stack the pocket onto the pant back, lining up the each corner of the pocket with its corresponding mark. The distance between these marks is intentionally smaller than the width of the pocket. This allows you to cover your markings, rendering them completely invisible after sewing the pocket in place. To align the back pocket with these drill holes simply position the pocket so that it is evenly placed between the two markings. Pin the pocket in place. Starting at the top edge of the pocket stitch down the side at 1/16". As you reach the corners of the pocket put the needle into the down position and pivot the fabric until you are aligned with the next folded edge. You will be creating two rows of topstitching in one complete step here. Once you reach the top edge of the pocket on the opposite side, put the needle into the down position. You will square off the top edge by sewing three to four stitches toward the interior of the pocket. With the needle again in the down position pivot the fabric so that you will now be stitching back down the other side of the pocket. Use the edge of the presser foot as a guide to run a second row of stitching 1/4" away from the first, finishing the topstitching by squaring off the top edge where you began sewing.

Step 19: Sew inseam

Align the pant front to the pant back with right sides together. You will be sewing the inseam of the pant in one very long seam. The inseam of JUMPSUIT the single longest seam in the entire garment. Line up the inseam starting with the crotch points of the front and back pants. These will match exactly. Holding together one pant leg from the front and back smooth the two layers until you get to the hem. Starting at the hem stitch together the pant back and pant front at 1/2". Because this is the longest seam you will need to take care to smooth and reposition your fabric as you sew so you do not inadvertently sew any extra layers of fabric that might be in the way, an unfortunately common occurrence where there are large quantities of fabric. For ease of sewing you may pin along the inseam, though pins are not used here. At the halfway point of the inseam check to make sure that your crotch points are matching then continue sewing the inseam until you reach the hem on the opposite leg.

Step 20: Serge entire inseam

The inseam of the pant will be serged in one complete line. Starting from the hem serge along the inseam of the pant until you reach the opposite hem.

Step 21: Iron inseam to back

Working with one pant leg at a time place the pant down on your work surface or ironing board. Locate the back of the pant and press the seam allowance so that the excess folds towards the back.

Step 22: Two rows of topstitching along entire inseam

Here you will be sewing two rows of topstitching along the inseam of the pant. Make sure that your seam allowance is pushed to the back. Starting at the hem sew your first row of topstitching 1/16" away from the inseam. As in previous topstitching you will be stitching together three layers of fabric. Because the seam is so long take care to check periodically that your seam allowance is still folding to the back. Once your first row of topstitching is complete begin your second row 1/4" away from the first.

Step 23: Sew together right and left outseams

Align your pant so that the front and back are facing each other. Before the outseams are sewn your pant may resemble a jumble of parts more than it does a pair of trousers. Align your pants so that the front and back are facing each other. To ensure that your fronts and backs are matching locate the four upper corners of the waist, then carefully match them together front to back and front to back. The inseam should now be in the center and the garment will look like a pair of pants. With the front and back now properly in position, sew each outseam from the waist to the hem at 1/2". As you are sewing the outseam you will be stitching through various thicknesses of fabric. This is because you will be stitching through the front pocket components which will create a variation in fabric thickness as you sew along.

Repeat for other side.

Step 24: Press open side seams

For this step you will be pressing the pant outseams open. Using the nose of the iron press back your seam allowance so that it falls evenly to the front and back of the pant. If you have a sleeve board, you can thread the pant leg onto the board and press your seams open. If you do not have a sleeve board work carefully as you iron so as not to inadvertently crease a different section of the pant.

Step 24: Turn hem two times and iron

The hem on the pant leg uses the same double fold technique that the sleeve and back pocket use. First turn the edge of the hem up 1/2" and press around the entire circumference of leg, this will be the first turn. Next, turn the material once more, this time so that there is a hem width of 2". Press around the entire circumference of the hem. Repeat for the opposite side. If you wish to hem your pants after your monogarment is assembled then you may skip this step and the next for now, and return to them later when you are ready to hem your JUMPSUIT.

Step 25: Two rows of topstitching on right and left hem

Turn the pants inside out then thread the leg into the sewing machine. As with the previous hems, sew your first row of topstitching 1/16" away from the interior folded edge of the hem. Stitch around the entire circumference of the hem. It is recommended to start the hem at the inseam. This is because the back tack used at the beginning and end of the stitch line will be less visible on the inseam than it would be on the outseam. Once the first row of stitching is complete, sew your final row of topstitching 1/4" away from the first row of stitching along the hem.

Repeat for both sides.

Part 3 Joining:

Step 1: Sew back waistband to front waistband left and right

The waistband of JUMPSUIT is composed of three parts, the back waistband and the front waistband which will have a right and left side. Though the pieces may appear symmetrical they are not. To determine the top from the bottom of the waistband locate the single notch on the short edge of the front waistband, this is your side seam. The center front of the waistband will have no notch. Match the single notch of your side seam with the corresponding notch on the back waistband, laying the pieces down with right sides together. The side seam notch is positioned off center so that it is easy to align the notches without inadvertently flipping the pieces. You will be sewing a total of two seams, the right and left side seams. If using, pin waistband pieces together. Sew both seams with a 1/2" seam allowance. Repeat for the other side. As you hold the waistband up notice the slight upward curve from the center back to the center fronts, it will resemble a very slight smile or a horizontal parentheses mark. This slight curve echoes the curve from your waist to hip, you may also see a similar curve in a favorite belt.

Step 2: Serge center front seam and side seams

In this step you will be serging a total of four seams. The right center front, both side seams and the left center front. With the right side facing up serge the first center front seam. Next, without clipping your threads feed into the serger the opposite center front edge. Clip the thread tails from the serger and then move to the side seams. The side seams will serge together two layers of fabric whereas the center front edges consist of just a single layer. Complete the serge on the second side seam.

Step 3: Iron seams to back

Working with the right side of the waistband facing up press the side seams of the waistband to the back. By pressing from the front or face of the band you can use the weight of the iron to push the seam cleanly open.

Step 4: Iron belt loops

To prepare the belt loops for sewing they must first be ironed with a double fold ensuring a clean finish. To create a double fold first press one edge of the belt loop over $\frac{1}{4}$ " or to the center of the belt loop strip. Next fold the other side of the belt loop strip so that the long edges of the belt loop are now touching. Lastly press the belt loop in half so that all of the raw cut edges are now encased in the center of the strip.

Step 5: Topstitch belt loops on both sides

Now that the belt loop has been pressed with a double fold, producing a clean edge for the belt loops, the piece is ready to be sewn down one side and then the other. Starting with the side of the belt loop where the folded edges touch, place the strip into the sewing machine and stitch $\frac{1}{16}$ " to $\frac{1}{8}$ " away from the edge. Make sure that you are catching all four layers of fabric. Use your fingers to guide the fabric only, the feed dog on the machine will do all of the work of pulling the belt loop through the machine. Once the first edge is stitched you are ready to sew the second row of topstitching. When you are sewing the belt loops it is best to sew in the same direction for both sides, or, in other words, sew one side from the top down, then sew the opposite side also from the top, down instead of from the bottom up. But sewing both rows of topstitching from the same direction you will mitigate any spiraling that may occur during sewing. This second row of topstitching will also be $\frac{1}{16}$ " to $\frac{1}{8}$ " away from the folded edge.

Step 6: Cut belt loops to size

Take the belt loop strip and measure out a section that is 4 and $\frac{1}{2}$ " long. Use the first cut belt loop as a template to cut the remaining 5 belt loops. Lay the template across the prepared strip and measure so that you have belt loops of an identical length. You will need a total of 6 belt loops for your monogarmant.

Step 7: Stitch belt loops to notches on bottom waistband

Locate the bottom of the waistband. The bottom edge of the waistband will have a single notch at the center back, the top edge of the waistband will have a double notch at the center back. On the bottom edge of the waistband there will be a series of double notches. These double notches indicate the positioning of the belt loops. Starting with the front of the waistband place the belt loop between the two notches. With a single row of stitching $\frac{1}{4}$ " away from the bottom edge of the waistband stitch into place each of the belt loops. The second belt loop will be positioned just in front of the side seam. By placing the belt loop just in front of the side seam, rather than on top of it, you will reduce bulk at the seam. Next, position the first back belt loop between the double notches, and continue with the placement of the belt loops for the other side. You may notice that the

length of the belt loop is greater than the width of the waistband, this excess length will be sewn down in the next step.

Step 8: Stitch waistband to pant bottom

Align the bottom edge of the waistband, where the belt loops have been stitched, with the waistline of the pant starting at the center front matching right side to right side. If using, pin the entire length of the waistband to the pant bottom. Stitch the waistband seam at $\frac{1}{2}$ ". As you sew, make sure that the side seam of the pant matches with the side seam of the belt loop. The next indicator for alignment will be the single notch on the center back of the waistband. This center back notch will line up exactly with the back crotch seam. Take care as you sew through the belt loops, some sewing machines are more heavy duty than others and will respond differently to thickness of material. If your machine is struggling with the additional layers of fabric, work slowly and do not fight the machine by forcing the fabric through.

Step 9: Serge the pant and waistband seam

With the pant side facing up serge together the waistband and pant seam.

Step 10: Iron the excess seam allowance to face up

With the additional layers of fabric from the front pocket, the waistband seam of the pant will need to be ironed so that the seam allowance excess faces up. Because of the length of the waistband you will need to reposition your fabric several times in order to press cleanly.

Step 11: Two rows of topstitching over waistband pant seam

For this step you will be sewing one row of topstitching at the waistband pant seam and then a second. Starting at the center front sew the first row of topstitching $\frac{1}{16}$ " away from the seam. It may seem counter intuitive, but you will be stitching each of the belt loops so that they are facing down. Again, use care as you sew around the waistband as some areas will be quite thick. Once your first row of topstitching is complete place the pant back into the machine and continue with your second row of topstitching $\frac{1}{4}$ " away from the first.

Step 12: Fold belt loops back so they line up with top of waistband

Completing the belt loops requires two steps, the first of which is to fold the belt loops up so that they meet the double notches on the top of the waistband. If using, pin the belt loops into place.

Step 13: Position and stitch the belt loops to top waistband

Once the belt loops are in position stitch along the top of the waistband at $\frac{1}{4}$ " to secure the belt loops into place.

Step 14: Topstitch excess length to pant

Here you will be securing the excess length of the belt loop to the top of the pant. First flatten the belt loop so that it is flush with the waistband. Then push the belt loop up slightly so that there is now a gap between the loop and the pant. This slight gap will disappear when the top is sewn to the waistband, though it may seem insignificant this step will allow the waistband to lay flat when the monogarment is complete. Place the waistband into the sewing machine and stitch the belt loop to the pant backstitching several times to give extra strength to the tack. Without clipping your threads move to the next belt loop and secure. Once each of the six belt loops has been secured clip all of the threads on the face of the garment and then move to the back threads tugging slightly to pull any thread tail from the top thread through to the back.

Step 15: Sew the top to the top of the waistband

This step will join the pant to the top. Starting at the center front line up the bottom corner of the top with the top corner of the waistband, right sides together. Stitching at $\frac{1}{2}$ " begin sewing the waist seam. As you sew make sure that you side seams are matching and that the double notches at the center back are meeting. As you finish the seam your center front corners should match exactly. You now have a monogarment!

Step 16: Serge top and top waistband seam

With the top of the monogarment facing up serge around the entire waistband and top seam. You will be serging all layers together including the belt loops. Use caution when serging through areas of thicker fabric and work slowly if your machine is lighter duty, Take care as well to reposition your fabric as you need to keep the area around the needle and blade of the serger free from fabric that may unintentionally pass under the foot.

Step 17: Iron all excess seam allowance facing down

In this step you will need to iron the seam allowance excess from the top waistband seam so that it faces down. The seam allowances from the waistband will now be facing each other, once facing up the other facing down. Thread the monogarment onto the nose of the ironing board for ease of pressing.

Step 18: Two rows of topstitching at top and bottom waistband seam

In this last step of joining you will be sewing two rows of topstitching along the waistband and top seam. This topstitching will keep the excess seam allowance in place by stitching it down and adding additional strength to the JUMPSUIT through the reinforcing stitches. Sew the first row of topstitching $\frac{1}{16}$ " away from the waistband and top seam. You will also be stitching down the tops of the belt loops in this step. Reposition the fabric as you sew as there will be much excess weight and material from the legs and top of the garment. By placing the pant and top on your workspace instead of allowing it to dangle off of the table you will reduce the amount of pull on your machine making it easier to sew. Once the first row of stitching is finished, complete the second row of stitching $\frac{1}{4}$ " away from the first line of topstitching.

Part 4 Finishing:

Step 1: Iron fly in half

To prepare the fly extension for the next step you will need to iron in in half lengthwise so that the right side of the material faces out. The fly extension is the wider of the two fly components.

Step 2: Turn under outside edge of fly facing.

In this step you will be turning under the outside edge of the fly facing by $\frac{1}{4}$ " for the entire length of the piece. The outside edge of the fly facing is the curved edge, the straight edge of the piece lines up with the center front and does not need to be pressed at this time.

Step 3: Sew the fly facing to the left front

For the first step in the construction of the fly, put the fly facing together with the body of the JUMPSUIT with right sides together. Notice how the raw edge of the fly facing is exposed, when completed this edge will be hidden. Align the fly facing at the center front and neckline intersection, you will see that the curve at the top of the fly facing matches exactly the curve of the neck hole. Next sew down the length of the center front, as you sew match together the notches on the fly facing with both the upper and lower intersecting seams of the waistband. Continue sewing until you reach the crotch intersection. It is important that the stitching along the center front meet exactly with the crotch seam line. By matching these two lines of stitching exactly the fly facing will be allowed to turn back freely in a later step. As with all of the longer seams in the later steps of constructing your monogarment adjust the fabric as needed for ease when sewing. When fighting with a sewing machine, the sewing machine generally wins.

Step 4: Iron seam open and over

Here you will be ironing the fly facing twice, first the center front seam will be pressed open. Next flip the fly facing so that it now sits on the inside of the JUMPSUIT. Once the fly facing is positioned use the iron to press the seam flat. As you are ironing gently pull the fly facing back so that there is a slight roll of fabric from the face, this will provide a clean edge when the garment is finished.

Step 5: Topstitch along the left center front opening

Begin the topstitching starting at the crotch seam opening. By starting at the crotch seam opening you will be able to match your previous topstitching line exactly. Sewing at $\frac{1}{16}$ "

away from the folded edge of the center front. Continue the topstitch until you reach to the neckline.

Step 6: Fold the fly right sides together and stitch along top opening. Turn inside out and push out corner.

Locate the upper edge, or short straight edge, of the fly extension. Turn the upper corners inside out so that the right sides of the fabric are facing each other. At ¼" stitch along the top edge of the fly extension from the cut edge to the folded edge. Next push your thumb all the way into the folded corner and pinching with your thumb and pointer finger flip the fly extension right side out. Roll the edges slightly between your fingertips to push the corner the rest of the way out. If needed gently poke out the corner with a pair of scissors taking care to not break through the fabric with the point of the scissors.

Step 7: Serge the fly on the long edge and the diagonal bottom edge at bottom
Starting from the top folded edge of the fly extension serge together both layers along the entire edge of the piece, then serge the bottom diagonal edge.

Step 8: Switch to zipper foot

For the next several steps a zipper foot will need to be used. The zipper foot somewhat resembles a snowboard while the standard foot resembles a set of skis. When you change to the zipper foot you will likely need to reposition the needle as well so that it goes to the right or left of the zipper foot.

Step 9: Align the zipper along the serged fly edge

Before setting the fly into the JUMPSUIT you will need to first attach the zipper to the fly extension. Align the zipper with the front of the garment along the right side opening. Depending on your height category the length of your zipper will vary. The Rational Dress Society JUMPSUIT for example, features zippers that come in 22", 24", 26" and 28" lengths. A non separating zipper will have two bumper or stopper edges. In sewing the fly you will want to line up the bottom bumper with the notch located near the lower edge of the fly extension. Do not worry if the top stopper or edge of the zipper does not meet the neckline exactly. It is more important that the bottom stopper align with the notch. This will ensure that you will be able to get into your JUMPSUIT. This notch also indicates where the fly extension will meet the crotch opening. For clarity in the demonstration a pin has been used to indicate the notch which might otherwise be obscured by the serging. Take your zipper and match it with the pin or notch.

Step 10: Topstitch zipper to edge of fly

Starting from the bottom edge of the fly extension stitch the zipper down matching the edge of the zipper tape to the serged edge of the fly extension.

Step 11: Sew the fly onto the right center front opening, catching both the fly and the zipper seam allowance

Line up the fly with the zipper already sewn into place along the right center front opening with right sides together leaving a ¼" gap between the edge of the fly and the top of the neckline. This ¼" edge allows the collar to be finished in later steps. Position the needle so that you are stitching as close to the zipper teeth as the foot will allow. Stitch along the center front at ½". As with the fly facing match the two notches on your fly extension with the top and bottom waistband seam intersections as you sew. After you pass the lower of the two waistband notches carefully begin to blend the center front seam allowance from ½" down to ⅜" or ¼" at the crotch opening. The fly extension and zipper will still appear to have a seam allowance of ½" so you will have to lift the piece occasionally to double check your seam allowance on the under layer. By moving the zipper slightly to the left of the opening the zipper will be better hidden when the monogarmment is complete.

Step 12: Lay the fly open and topstitch the right center front opening

Starting at the neckline sew a row of topstitching 1/16" away from the center front seam. You may need to readjust the position of the needle once more so that you are stitching nearer to the zipper teeth. As you are sewing gently pulling the fly extension and the center front of the JUMPSUIT apart making sure that the material does not overlap the teeth of the zipper.

Step 13: Mark with two pins the top and bottom seam of the waistband on the open zipper edge

To ensure that the waistband seams match when the fly is complete you will need to mark the open end of the zipper tape with two pins indicating the top and bottom waistband seams. Take care to only pin the zipper tape. Then open the zipper to it's fullest point. With the zipper position the pinned edge of the zipper tape along the fly facing double checking that your pins match up with the waistband seams.

Step 14: Align the open zipper edge on the fly facing and topstitch

Position the bottom of the zipper so that when the fly is closed it lays flush with fly facing. Stitch the zipper and fly extension together starting at the bottom edge.

Step 15: Close the zipper to check alignment

Close the zipper to check the alignment of both the zipper and the waistband seams.

Step 16: Run a topstitch along zipper to secure zipper tape

Once the zipper alignment is correct stitch down the unsecured edge of the zipper tape to reinforce and ajoin the loose edge of the zipper tape to the fly facing.

Step 17: Topstitch fly to the left front opening along left front opening (twice)

Now that the zipper is in place, switch back to the standard presser foot. In this step the fly facing will be stitch down to the face of the right front opening of the monogarmment. Lay the fly facing so that it is flush with the garment and starting at the neck stitch a line 1/16" away from the folded edge of the fly facing. Continue stitching the fly facing

following the bottom curve until you reach the fly opening at the center front. Once the first row of stitching is complete run a second line of topstitching parallel to the first $\frac{1}{4}$ " away.

Step 18: Topstitch the fly facing and body together

This final step of the fly secures together the loose edge of the fly extension with the body of the garment, tacking it firmly into position. With all layers together stitch a tack where lower curve of the fly stitching becomes straight or vertical.

Step 19: Stitch around the outside edge of the collar

Place your collar pieces right sides together. Starting at the bottom of the collar stitch to the first collar point at $\frac{1}{4}$ ". Before you reach the stitch line intersection of the top of the collar and the collar point, put the needle into the down position and stitch a single diagonal stitch before rotating the collar again and continuing with the top collar seam. Repeat for the opposite collar point. This single diagonal stitch will aid in achieving a sharp collar point.

Step 20: clip corners

Following the diagonal stitch at the collar point trim off the excess seam allowance. Trimming the excess seam allowance will reduce bulk in the collar point allowing it to lay flat. Turn the collar right side out and roll the corner between your fingertips to turn the corner completely. If the corner is stubborn carefully use the end of a pair of scissors to delicately push the corner into place. Use caution if using the scissor method as it is quite easy to poke through as there is little seam allowance left between the stitch and the cut edge of the fabric.

Step 21: Iron seam open and then closed

Open the collar so that the top collar seam faces you, then carefully press the seam open using the nose of the iron to get as close as you can to the collar point. Once the seam has been pressed open lay the collar flat and press so that there is a clean edge.

Step 22: Iron under the top collar

To prepare for attaching the collar in the next steps you will need to press the bottom edge of one side of the collar up $\frac{1}{4}$ ".

Step 23: Stitch the under collar to the neckline

Take the flat side of the collar and match the left center front neck to the collar with right sides together. There are a series of notches along the bottom edge of the collar, these notches will indicate where the collar will line up with the sleeve seams as well as the center back of the top. Begin stitching exactly at the center front neckline corner stitching the body to the collar at $\frac{1}{4}$ ". You may need to ease the neckline into the collar as the neckline may have stretched during construction of the top.

Step 24: Stitch in the ditch

By stitching in the ditch, sometimes called crack stitching, you will be completely enclosing the raw edge of the neckline with the pressed edge of the collar. Sewing along the folded edge of the collar you will align the fabric so that the bobbin thread will line up with the first collar seam making the stitch nearly invisible. In order for the stitch to be invisible on the underside of the collar the folded edge of the collar facing you should line up so that it is just over your first stitch line where you initially sewed the collar onto the body. Periodically lift the undercollar as you are sewing to check your alignment.

Step 25: Two rows of topstitching around outer edge of collar

In the final step of sewing your JUMPSUIT you will be sewing two rows of topstitching around the outer edge of the collar. Starting at the right neck opening stitch at 1/16" away from the edge of the collar pivoting as you reach the corners. Once the first row of stitching is complete sew the second row of topstitching 1/4" away from the first line.

Your JUMPSUIT is now complete. Congratulations you may now throw away all of your clothes.