This household sewing machine is designed to comply with IEC/EN 60335-2-28 and UL1594

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the following:
Read all instructions before using this household sewing machine.

DANGER - To reduce the risk of electric shock:
• A sewing machine should never be left unattended when plugged in. Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
• Always unplug before relamping. Replace bulb with same type rated 5 Watt.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons:
• This sewing machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the sewing machine by a person responsible for their safety.
• Children should be supervised to ensure that they do not play with the sewing machine.
• Use this sewing machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
• Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
• Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from the accumulation of lint, dust, and loose cloth.
• Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
• Always use the proper needle plate. The wrong plate can cause the needle to break.
• Do not use bent needles.
• Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
• Wear safety glasses.
• Switch the sewing machine off (“0”) when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
• Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
• Never drop or insert any object into any opening.
• Do not use outdoors.
• Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
• To disconnect, turn all controls to the off (“0”) position, then remove plug from outlet.
• Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
• The sound pressure level under normal operating conditions is \( \leq 75 \text{dB(A)} \).

SAVE THESE INSTRUCTIONS
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    (only EMERALD™ 203)

PRESSER FEET

Utility Foot A
Attached on the machine upon delivery. This foot is used mainly for straight stitching and zigzag stitching with a stitch length longer than 1.0.

Presser Foot B
When sewing short zigzag stitches and satin stitches with less than 1.0 mm stitch length, other utility stitches or decorative stitches, use this foot. The tunnel on the underside of the foot is designed to feed smoothly over the stitches.

Buttonhole Slider Foot C
This foot has a space in the back to set the size of the buttonhole. The machine will sew a buttonhole to fit that button size.
Blind Hem Foot D
This foot is used for blind hem stitches. The inner edge of this foot guides the fabric. The right toe of the foot is designed to ride along the hem edge.

Zipper Foot E
This foot can be snapped on either to the right or to the left of the needle. This makes it easy to sew close to both sides of the zipper teeth. Move needle position to right or left to sew closer to zipper teeth or for covering large cording.

Non Stich Glide Foot H
This foot, with a coating underneath, is used when sewing foam, vinyl, plastic, or leather to minimize the risk of these materials sticking to the foot.

Edging Foot J
This foot is used for overcasting and seam/overcasting, i.e. stitches which have a stitch width of 5.0 and 5.5 mm. Stitches form over the pin which prevents puckering at the edge of the fabric.

Quilter’s 1/4” Piecing Foot P
This foot is used when piecing quilt blocks. The foot has seam guide marks 1/4” (6 mm) and 1/8” (3 mm).

Transparent Foot B
This foot is used for decorative sewing. The presser foot has the same underside as presser foot B.

Gathering Foot
This foot is used for gathering fabric or to gather and attach a ruffle in one step. The foot is suitable for light to medium weight fabrics.

Dual Feed Foot (only EMERALD™ 203)
This foot equalizes the feeding of the upper and lower layers of fabric which improves the matching of plaids, stripes and patterns.
Utility Stitches, Menu 1 & 2
Use those stitches for utility sewing, garment sewing and mending.

1.0 – Buttonhole
Buttonhole for blouses, shirts and linen.

1.1 – Straight Stitch
For all kinds of sewing in woven fabrics.

1.2 – Stretch Stitch
For seams in tricot and stretch fabrics.

1.3 – Reinforced Straight Stitch
For seams which are subject to considerable strain. Use to reinforce and topstitch sportswear and working clothes.

1.4 – Three-Step Zigzag
For overcasting, mending, sewing on patches and elastics.

1.5 – Zigzag
For lace edging and sewing on bands.

1.6 – Flatlock
Decorative hems and overlapped seams, belts and bands. For medium/heavy stretch fabrics.

1.7 – Overcast Stitch
Seam and overcast in one step along the edge or trim later. For light stretch and non-stretch fabrics.

1.8 – Overlock
Seam and overcast in one step along the edge or trim later. For medium and medium/heavy stretch fabrics.

1.9 – Sewing on Button
Sew on buttons with two or four holes.
2:01 – Double Overlock
Seam and overcast in one step along the edge or trim later. For heavy stretch fabrics.

2:02 – Darning Stitch
Darn and mend work clothes, jeans, table cloths and towels.

2:03 – RicRac Stitch
For joining fabric edge to edge, overlapping leather, or decorative stitching.

2:04 – Elastic Blind Hem
Invisible hems in stretch medium and heavy fabrics.

2:05 – Woven Blind Hem
Invisible hems in woven fabrics.

2:06 – Bridging Stitch
For joining two pieces of fabric with finished edges and for elastic shirring.

2:07 – Darning Stitch
Darn and mend work clothes, jeans, table cloths and more.

2:08 – Bartack Stitch
For applying belt loops and reinforcing pockets.

2:09 – Rounded Buttonhole
Heirloom buttonhole for “hand look” on fine and delicate fabrics. Also for lapels in suit coat.

2:10 – Stretch Buttonhole
Heavy reinforced buttonhole for heavy fabrics.

2:11 – Keyhole Buttonhole
Keyhole buttonhole with square end for tailored jackets, coats, etc.

2:12 – Eyelet
For garments and home textiles.

2:13 – Satin Stitch 2mm
For appliqués, rounded edge, sewing on laces and bands.

2:14 – Satin Stitch 4mm
For appliqués, rounded edge, sewing on laces and bands.

2:15 – Satin Stitch 6mm
For appliqués, rounded edge, sewing on laces and bands.
Utility Stitches, Menu 2
only EMERALD™ 203

2:16 – Overlock Stitch
Seam and overcast in one step along the edge or trim later. For medium stretch fabrics.

2:17 - Gathering Stitch
For gathering.

2:18 – Shell Edge Stitch
For edgings, sew over the edge on light stretch fabrics, sew woven fabric on bias.

2:19 – Elastic or Smocking Stitch
Sew over two rows of elastic thread for elastic shirring.

2:20 – Heirloom Buttonhole
For hand look on fine and delicate fabrics. Tip: For jeans buttonholes, increase length and width of the buttonhole. Use thicker thread.

2:21 – Heavy Duty Buttonhole
With reinforced bartacks.

2:22 – Leather Buttonhole (Straight Stitch)
For leather and suede.

2:23 – Scallop Stitch
Decorative Stitches
Menu 3

only EMERALD™ 203

Menu 4

only EMERALD™ 203

Menu 5

only EMERALD™ 203

Alphabet Menu
EMERALD™ 203       EMERALD™ 183
ABCD  ABCD    ABCD

Alphabet Position Table

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 01| 02| 03| 04| 05| 06| 07| 08| 09| 10| 11| 12| 13| 14| 15| 16| 17| 18| 19| 20| 21| 22| 23| 24| 25| 26| 27| 28| 29| 30| 31| 32| 33| 34| 35| 36| 37| 38| 39| 40| 41| 42| 43| 44| 45| 46| 47| 48| 49| 50| 51| 52|
| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z |
| 27| 28| 29| 30| 31| 32| 33| 34| 35| 36| 37| 38| 39| 40| 41| 42| 43| 44| 45| 46| 47| 48| 49| 50| 51| 52| 53| 54| 55| 56| 57| 58| 59| 60| 61| 62| 63| 64| 65| 66| 67| 68| 69| 70| 71| 72| 73| 74| 75| 76| 77| 78|
| À | À | Ė | Ñ | Û | Õ | û | Ý | û | ß |
| 79| 80| 81| 82| 83| 84| 85| 86| 87| 88| 89| 90| 91| 92| 93| 94| 95| 96| 97| 98| 99| 100| 101| 102| 103| 104| 105| 106| 107| 108| 109| 110| 111| 112| 113| 114| 115| 116| 117| 118| 119| 120| 121| 122| 123| 124| 125| 126| 127| 128| 129| 130| 131| 132| 133| 134| 135| 136| 137| 138| 139| 140| 141| 142| 143| 144| 145| 146| 147| 148| 149| 150| 151| 152|
UNPACKING
1. Place the machine on a sturdy, flat surface, remove the packaging and lift off the cover.
2. The machine is delivered with an accessory bag, a main cord and a foot control cord.
3. Wipe the machine, particularly around the needle and needle plate to remove any oil before sewing.

PACK AWAY AFTER SEWING
1. Press the power switch to turn off the machine.
2. Unplug the cord from the wall socket and then from the machine.
3. Wind the main cord around your hand and place the cord in the space in the carrying case (A).
4. Unplug the foot control cord from the machine. Wind the foot control cord around your hand and place it in the space of the foot control (B).
5. Check to ensure that all accessories are in the accessory box. Slide the box on to the machine.
6. Press the foot control together and place it in the foot control space in your carrying case (C).
ACCESSORY BOX

In the accessory box there is a special tray for presser feet and bobbins plus a space for other accessories.

Store the presser feet and the bobbins in the tray so they are always easily accessible.

Remove the Accessory Box /
Use the Free arm
Keep the accessory box on the machine to provide a larger flat work surface.

Slide the accessory box to the left when you wish to remove it and use the free arm.

To facilitate sewing trouser legs and sleeve hems use the free arm.

To replace the Accessory Box, slide it tight onto the machine until it fits in place.

EXTENSION TABLE

(only EMERALD™ 203)

Use the Extension Table to extend the sewing surface so you can easily sew large projects and quilts.

1. Unpack the table and remove the protective plastic film.
2. Place the table on a flat surface so that the holes for the legs are facing upwards. Mount the legs into the holes.
3. Slide the table onto the free arm of the machine. If necessary screw the feet up or down to adjust the height.
CONNECT THE FOOT CONTROL
Among the accessories you will find the foot control cord and the main power cord. Connecting the foot control cord to the foot control is only necessary the very first time you are going to use the machine.

1. Take out the foot control cord. Turn the foot control over. Connect the cord to the socket inside the space of the foot control.
2. Push firmly to make sure it is properly connected.
3. Lay the cord into the slot on the underside of the foot control.

CONNECT TO THE POWER SUPPLY
On the underside of the machine you will find information about the power supply (V) and the frequency (Hz).

Before plugging in the foot control, check to ensure that it is of type “FR4/FR5” (see underside of foot control).

1. Connect the foot control cord to the front socket on the bottom right side of the machine (A).
2. Connect the power cord to the rear socket on the bottom right side of the machine. (B)
3. When you press the power switch to ON (C), both the machine and the light are switched on.

Note: Your EMERALD™ sewing machine is adjusted to provide the best stitch result at normal room temperature. Extreme hot and cold temperatures can affect the sewn result.

For USA and Canada
This sewing machine has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.
SEWING GUIDE REFERENCE CHART
Consult the Sewing Guide Reference Chart for the fast easy way to select the best stitch, stitch length, stitch width, thread tension, presser foot and presser foot pressure for your sewing technique and fabric.

Look in the column for your fabric type:

- WOVEN FABRICS: for stable fabrics that have no stretch. Usually woven.
- STRETCH FABRICS: for fabrics that have stretch. Usually knit.
- LEATHER/VINYL: for suede, real leather and for artificial leather and suede.

Select the stitch for the technique you want to sew:

- SEAM: sews two pieces of fabric together.
- OVERCAST: overcast fabric edges to prevent them from fraying and to help them lay flat.
- SEAM/OVERCAST: sews the seam and overcasts the edge all at one time.
- BASTE: a temporary stitching for fitting garments, gathering and marking. Use maximum stitch length.
- Note: Basting will leave permanent holes in leather and vinyl.
- BLIND HEM: creates an invisible hem on garments. Is not recommended for light weight fabric or for leather/ vinyl.
- HEM: sews the best visible or top stitch hem for your fabric type and weight.
- BUTTONHOLE: sews the best buttonhole possible for your fabric.

1. Fabric
2. Presser foot pressure
3. Sewing technique
4. Stitch
5. Presser foot
6. Thread tension
7. Stitch length
8. Stitch width
**LOWER THE FEED TEETH**

To lower the feed teeth you need to remove the accessory box. The feed teeth lever is located on the back of the machine at the base of the free-arm.

Slide the lever (A) to the right to lower the feed teeth. The feed teeth are raised when you move the lever (A) to the left. The feed teeth will come up when you begin to sew or turn the handwheel towards you. The feed teeth should be lowered when sewing on buttons.

**CHANGING THE PRESSER FOOT**

⚠ Turn off the main switch

1. Make sure the needle is in the highest position. Pull the presser foot towards you.
2. Line up the cross pin on the foot with the gap in the presser foot ankle. Press back until the foot snaps into place.

**CHANGING THE NEEDLE**

⚠ Turn off the main switch

1. Use the hole in the multipurpose tool to hold the needle.
2. Loosen the needle screw (B).
3. Remove the needle.
4. Insert the new needle using the multipurpose tool. Push the new needle upwards with the flat side away from you until it will go no further.
5. Tighten the needle screw (B).
The sewing machine needle plays an important role in successful sewing. To ensure you will get a quality needle, we recommend needle system 130/705H. The needle package included with your machine contains needles of the most popular sizes for sewing on woven and stretch fabrics.

Universal Needles (A)
Universal needles have a slightly rounded point and come in a variety of sizes. For general sewing in a variety of fabric types and weights.

Stretch Needles (B)
Stretch needles have a special scarf to eliminate skipped stitches when there is a flex in the fabric. For knits, swimwear, fleece, synthetic suedes and leathers. Marked with a yellow band.

Denim Needles Sizes 90 (C)
Denim needles have a sharp point to penetrate tightly woven fabrics without deflecting the needle. For canvas, denim, microfibers. Marked with a blue band.

Note: Change the needle often. Always use a straight needle with a sharp point (1). A damaged needle (2) can cause skipped stitches, breakage of needles or snapping of thread. A damaged needle can also damage the stitch plate.
SPOOL PINS

Your sewing machine has two spool pins, a main spool pin and an auxiliary spool pin. The main horizontal spool pin (A) is used for sewing with normal threads. The auxiliary vertical spool pin (B) can be used for large spools of thread or specialty threads. Also use the vertical spool pin for bobbin winding.

Horizontal Position
Place a spool cap and the thread spool on the spool pin. Make sure that the thread reels over the top. Slide on a second spool cap, slightly larger than the thread spool. The flat side of the spool cap should be pressed firmly against the spool. There should be no space between the spool cap and the thread spool.

Vertical Position
The vertical spool pin is used when winding a bobbin from a second spool of thread or for a second spool when sewing with a twin needle. It can also be used when you are sewing with specialty threads.

Raise the spool pin to the vertical position. Slide on the large spool cap and place a felt pad under the thread spool to prevent the thread from reeling off too fast. Place thread spool on the spool pin.

Do not place a spool cap on top of the vertical spool pin as it may prevent the spool from rotating.

Note: When the spool pin is used in the vertical position, the thread tension might need to be adjusted manually.
THREADING THE UPPER THREAD

Make sure the presser foot is raised and the needle is in the up position.

⚠️ Turn off the main switch.

1. Pull the spool pin up. Place a spool cap and then the thread on the spool pin. Place the second spool cap on the spool pin (A). Push the spool pin back in.

2. Bring the thread in the direction of the arrow under the thread guide (B) so that the thread snaps into place. Then bring the thread under the second thread guide (C).

3. Bring the thread down between the thread tension discs (D).

4. Continue threading by drawing the thread up into the slot on the take-up lever (E) from the right to the left.

5. There are two thread guides close to the needle: (F) and (G). Insert the thread into the two thread guides.

6. The needle is threaded from front to back. The white on the presser foot ankle makes it easy to see the eye of the needle. See needle threader instructions on the next page.

7. Place thread under the presser foot and into the thread cutter where it is cut.
Needle Theder
The needle must be in the up position to use the built-in needle threader. We also recommend lowering the presser foot.

1. Use the handle to pull the needle threader down, catching the thread under the guide (A).
2. Push the needle threader all the way down until the metal flanges cover the needle. A small hook will pass through the needle eye (B).
3. Place the thread under the flanges in front of the needle, so the thread catches into the small hook (C).
4. Let the needle threader gently swing back. The hook pulls the thread through the needle eye and forms a loop behind the needle.
5. Pull the thread loop out behind the needle. Place the thread under the presser foot and cut the thread.

Note: The needle threader is designed to be used for size 70-120 needles. You cannot use the needle threader for size 60 needles or smaller, the wing needle, twin needle or triple needle. There are also some optional accessories that require manual threading of the needle.

When threading the needle manually make sure that the needle is threaded from front to back. The white presser foot ankle makes it easy to see the eye of the needle.
Threading for Twin Needle

⚠️ Turn off the main switch

1. Insert a twin needle.
2. **LEFT NEEDLE**: Thread the machine as explained on page 18 and thread the left needle.
3. Pull up the vertical spool pin and place a spool cap on the spool pin. Place a thread spool or wind a bobbin with the thread you are going to use as the second upper thread.
4. **RIGHT NEEDLE**: Thread the machine as before but this thread should lie outside the upper needle thread guide (A) and behind the lower needle thread guide (B). Thread the right needle manually.

**Note**: The maximum twin needle width to be used on this machine is 2.5mm.

**Note**: Only use symmetrical twin needles (C). Do not use this type of twin needle (D), since it may damage your sewing machine.

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**CUTTING THE THREAD**

Once you have finished sewing you can cut the thread by raising the presser foot and draw the threads to the left side of the machine and cut them using the thread cutter.
WIND THE BOBBIN

1. Pull the vertical spool pin up (A). Place a large spool cap on the spool pin and place the thread on the spool pin.
2. Bring the thread under the thread tension disk (B) and around clockwise.
3. Insert the thread though the hole in the bobbin from the inside to the outside. Place the bobbin on the bobbin winder spindle with the free end of the thread at the top.
4. Push the bobbin to the right.
5. Hold the thread end and press the foot control. After a few turns of the bobbin, cut off the thread end. When the bobbin is full it will stop rotating. Push the bobbin winder to the left and remove the bobbin. Cut off the thread.

Place the Bobbin in the Machine

⚠️ Turn off the main switch

1. Make sure that the needle is fully raised before inserting or removing the bobbin. Open the bobbin cover by moving the release button to the right (A). Remove the cover (B).
2. Place the bobbin in the bobbin case so that the thread is running in a counterclockwise direction.
3. Pull the thread though the slit and pull it towards the left into the tension.
4. Pull the thread so that you have about 6 inches (15cm) of thread. Replace the bobbin cover plate.
PRESSER FOOT LIFTER
The presser foot is lowered or raised with the presser foot lifter. If you are sewing on heavy fabric or several layers of fabric, the presser foot can be raised higher to make it easier to place the fabric underneath the presser foot.

THREAD TENSION
To understand the correct thread tension, sew a few sample straight stitches at different settings.

1. Begin with a tension that is too loose, i.e. set at the lowest number. The bobbin thread will lie straight and the top thread will be drawn to the underside of the fabric.

2. If you set the tension at the highest number, the top thread might break and the seam may pucker.

3. The correct thread tension is set when the threads interlock in the middle of both fabric layers or, in the case of decorative stitches, on the underside.

Make a few tests on a scrap piece of the fabric you are going to sew and check the tension.
MACHINE FUNCTIONS

Speed Control Slide
With the speed control slide, you can change the maximum sewing speed to suit your needs. The slide limits how fast you can sew.

To increase the sewing speed, slide the bar to the right.

To reduce the sewing speed, slide the bar to the left.

Foot Control
You can control the sewing speed by using the foot control. The harder you press the foot control, the faster the machine sews.
If you press the foot control all the way, the machine runs at the maximum speed set by the speed control slide.
Needle Stop Up/Down (A)
Press this button to lower the needle down or raise up. This function can be useful when turning a corner on your garment or project.

Stop (B)
STOP is used to conclude a stitch or to sew just one unit of the stitch. Your sewing machine ties off the thread and stops automatically when one stitch unit or stitch program has been completed. The stop icon will be lit in the InfoDisplay.

If you touch the STOP-button while the machine is running, the machine will complete the stitch unit, make lock stitches and stop.

If you touch the STOP-button while the machine is standing still, the machine will sew one stitch unit and then stop.

Fix (C)
By using the FIX button you can tie off a stitch at the beginning and/ or at the end. The FIX icon on the InfoDisplay is lit when FIX is activated. Press the FIX button to turn on/ off the function.

If you touch the FIX-button while the machine is running, the machine will make lock stitches without completing the stitch unit. After the completion of the lock stitches the FIX-function is deactivated and the FIX-icon in the InfoDisplay is unlit.

If you touch the FIX button while the machine is standing still, the machine will make lock stitches when you press the foot control and then continue to sew your stitch.

Reverse (D)
Reverse is pressed to sew in reverse. An arrow will be shown in the InfoDisplay when the function is active. If you press and hold the reverse button the machine will sew backwards until you release the button. If you press and release the button before starting to sew, the machine will permanently sew in reverse. Press the button again to sew forward again.

The longest reverse stitch length is 3 mm.
Presser Foot Pressure Dial
Turn the presser foot presser dial to adjust the pressure of the presser foot on the fabric when sewing on different thicknesses of fabric. The pressure dial should be set on 4 for regular sewing. Reduce the pressure to 1-2 for applique, cutwork, stretch fabric, chiffon, lace, organdy and other fine fabric sewing.

Stitch Balance (A)
If you are sewing a manual buttonhole or a decorative stitch and the stitch is uneven, you can adjust the stitch with the stitch balance dial. The dial is located on the side of the machine (A).

Note: Always place the dial at the neutral position when you have sewn your stitch.

When a stitch is too tight (B), correct it by turning the dial counter clockwise.
When a stitch is too loose (C), correct it by turning the dial clockwise.
FUNCTION BUTTONS

Direct Stitch Selection Buttons (A)
When menu one is activated you can use the direct stitch selection buttons to choose your stitch. By pressing any of the 0 to 9 buttons you select the stitch illustrated on that button immediately.

Stitch Width (B)
The stitch width is set in the same manner as the stitch length. The preset width is visible on the InfoDisplay. The width can be adjusted between 0 and 7 mm. If a straight stitch is selected, the width button is used to adjust the needle position to the left or right.

Stitch Length (C)
When you select a stitch, your machine automatically sets the best stitch length. The stitch length is visible on the InfoDisplay. You can change the stitch length by pressing the + or – button.

Menu Selection (D)
Press the Menu Selection button to select different stitch menus. When turning the machine on, the direct stitch selection mode (menu one) is always selected.

There are five different stitch menus; two utility stitch menus and 3 decorative stitch menus. By looking at the LED lights to the right of the screen, you will be able to see which menu you have selected.

There is also an alphabet menu with lower and uppercase letters and numbers.

For more information about the stitches see chapter 1.

Font Menu Selection (E) (only E M E R A L D™ 203)
Touch this button to toggle between the two fonts available (Block and Script). The currently chosen font is highlighted on the display.
Mirror Side to Side (F)
Press this button to mirror the selected stitch side to side. If this button is pressed when straight stitch with left needle position is selected, the needle position is changed from left to right. A stitch in a combination can also be mirrored. The change will be visible on the InfoDisplay.

If you touch the Mirror side to side button while sewing, the machine will finish the stitch and mirror the following stitch.

Stitch Elongation Button (G)
The stitch elongation button can elongate satin stitches 3:14, 3:15, 3:16, 4:01, 4:02 and 4:04 up to five times its normal size while maintaining the density. See the change in the stitch in the InfoDisplay.

Memory Button (H)
Use the memory to store stitch combinations. The stored combinations will not be lost even if you turn the sewing machine off.

EMERALD™ 203 have eight memories and EMERALD™ 183 have four memories in the machine. Each memory can hold up to 20 different stitches. See page 31 to program stitches into memories.

Edit Button (I)
To modify the settings of a character or stitch in the memory mode, use the stitch width or length + or - buttons to select the stitch to be modified. Then press the Edit button to set the selected stitch in the editing mode. Manual setting of the stitch length, width and mirror for these memorized stitches is now possible. Press the edit button again to leave the editing mode and return to memory mode.

Clear Button (J)
Use this button to erase an incorrect character or stitch in a combination. The machine erases the character you have selected. Each press of the button erases one character, or stitch in a combination.

BUZZER SOUND
The machine makes a click sound when you press a button on the machine to let you know you are selecting that stitch or function. It also has a warning sound when selecting an incorrect function.

It is possible to turn off the sound of the button clicks and the warning sounds, press the “E” button while turning on the machine. On the InfoDisplay you will see two different modes. Select between the audio on or off by touching the width + or - buttons. Touch the “M” button to return to normal mode.
DISPLAY ICONS
A. Stitch number
B. Thread tension recommendation
C. Presser foot recommendation
D. Reverse icon
E. Needle up/down icon
F. FIX icon
G. STOP icon
H. Mirror icon
I. Stitch length
J. Needle position
K. Stitch
L. Stitch width

Display Icons – Alphabet
M. Stitch/Character number
N. Thread tension recommendation
O. Presser foot recommendation
P. Reverse icon
Q. Needle up/down icon
R. FIX icon
S. STOP icon
T. Stitch width
U. Stitch
Display Icons – Elongation
V.  Stitch number
W.  Stitch elongation
X.  Thread tension recommendation
Y.  Reverse icon
Z.  Needle up/down icon
a.  FIX icon
b.  STOP icon
c.  Presser foot
d.  Stitch length
e.  Stitch width

Display Icons – Memory
f.  Memory number
g.  Number of the current unit
h.  Total number of units
i.  Stitch width
j.  Stitch length
k.  Needle up/down icon
l.  Mirror icon
m.  FIX icon
n.  STOP icon
o.  Stitch to edit
p.  Needle position
WARNING MESSAGES

The Presser Foot is Not Lowered
If you touch the foot control and the presser foot is not lowered, the machine will beep and give you the following message.

Main Motor Blocked
This message means that the thread is twisted or jammed and the hand wheel motor cannot move. Look at the trouble shooting guide on page 43.

The Buttonhole Lever is not Lowered
The buttonhole or darning stitch was selected and the foot control was pressed while the buttonhole lever was raised.

Buttonhole Lever is not Lifted
A stitch other than the buttonhole or darning stitch was selected and the foot control was pressed while the buttonhole lever was down.

Bobbin Winding
The following screen will be shown while you are winding the bobbin. Once the bobbin is full and you have pulled the bobbin winder to the left, the message will disappear.
PROGRAMMING

Your sewing machine has a programming function. You can program up to 20 stitches and characters into the same combination. Combine any stitches except the following: 1:09, 1:00, 2:07, 2:08, 2:09, 2:10, 2:11 and 2:12 (and 2:20, 2:21, 2:22 on E M E R A L D™ 203). Save the combination in one of the memories.

Create a Combination
1. Touch the memory button on your machine. A pop up appears on your InfoDisplay allowing you to choose which memory you want to save your stitches in. Select the number of the memory.
2. When you are in the memory screen the cursor flashes on the first position.
3. Choose a stitch with the menu selection button to get to the desired stitch menu and then the number of the stitch.
4. The stitch you have selected will be shown in the InfoDisplay and the cursor will move to the next position. Repeat step 3 to insert more stitches.
5. Start to sew your sequence.
6. Touch the memory button to leave the memory mode.

Adding Stitches or Letters in a Sequence
1. To add a stitch or letter in a sequence you need to place the cursor where you want the stitch to be placed. The stitch you add will be inserted where the cursor is (A). By pressing the stitch width or length + or - buttons you will move forward and backward in your sequence.
2. Select the stitch menu of your choice and choose the number of the stitch you wish to add.
Editing Stitches/Letters
1. In the memory mode, use the stitch width or length buttons + and - to place the cursor at the stitch you wish to edit.
2. Touch the “E” button to edit the stitch. The background of the stitch you wish to edit becomes black (B). You can adjust the width, length, mirror the stitch and on some stitches, elongate the stitch.
3. Touch the “E” button again to return to the memory mode.

Removing Stitches/Letters
1. In the memory mode, use the stitch width or length buttons to go to the stitch you wish to delete. The machine will delete the stitch the cursor is under.
2. Touch the “C” button to delete the stitch that you have selected. The stitch behind the one that you have deleted will move forward.

Opening and Sewing a Stitch Memory
1. Go into the memory mode by touching the “M” button.
2. Choose the number of the memory you wish to enter and the memory will open.
3. Start to sew by pressing the foot control. The cursor on the display will move along with the stitch while sewing.

Note: Once you have reached the end of the sequence the machine will start over again from the beginning unless you have programmed a stop. The machine will start to sew the stitch where the cursor is.

Stitch Elongation
To elongate a stitch means that you make the stitch longer without changing the stitch density. You can elongate the following stitches:
3:14, 3:15, 3:16, 4:01, 4:02 and 4:04.

You can elongate the stitch up to five times its normal length. When you press the stitch elongation button you will see the following display. The stitch on the screen will change according to your changes.
SEAM
A seam sews two pieces of fabric together with a seam allowance that usually will be pressed open. In most cases edges of the seam allowance are finished with an overcast stitch before sewing the seam.

Seams in stretch fabric must stretch with the fabric. The Stretch Stitch makes a stretchy seam that is suitable for sewing together pieces of light stretch fabric.

1:1 Straight Stitch
Fabric: Woven medium, cut in two.
Use: Presser Foot A and size 80 needle.
Line up the fabric edge with the 5/8” (15 mm) seam guide.

1:2 Stretch Stitch
Fabric: Stretch light, cut in two.
Use: Presser Foot A and size 75 stretch needle.
Line up the fabric edge with the 3/8” (10 mm) seam guide.
EDGE/QUILTING GUIDE
The Edge/Quilting Guide is used for wide seam allowances, topstitching, or channel quilting. Slide the guide into the clip on the ankle. Adjust to the desired position.

OVERCAST
The three-step zigzag, is up to 1/4” (7mm) wide and suitable for all types of fabrics. Use this stitch for overcasting, butting two edges together to join them, mending tears and other special finishing.

Use Edging Foot J when overcasting.

SEAM AND OVERCAST
The Seam/Overcast stitch sews the seam and overcasts the edge all at one time. There are a number of different Seam/Overcast stitches on your sewing machine, to give the best result for your chosen fabric.

1:4 Three-Step Zigzag
Fabric: All types of fabric.
Use: Presser Foot J.

1:7 Overcast Stitch
Fabric: Stretch light or woven light/medium, cut in two.
Use: Presser Foot J.
Let the toe of the presser foot guide the fabric as shown in the picture.

2:1 Double Overlock Stitch
Fabric: Woven heavy, cut in two.
Use: Presser Foot B and size 80.

1:8 Stretch Seam Overcast Stitch
Fabric: Stretch heavy, cut in two
Use: Presser Foot B and size 90.
DARNING AND MENDING

Darning a small hole or a tear before it becomes larger can save a garment. Choose a fine thread in a color as close to your garment as possible.

Sew:

- Attach the Buttonhole Slider Foot C and choose stitch 2:07.
- Place the fabric in position under the presser foot.
- Lower the presser foot and pull the button holder to the rear. By pulling the button guide plate away from you, set the length of the darning stitch.
- Step on the foot control. Start sewing above the hole and sew down over it. The machine will sew back and forth 15 times.

Note: The maximum length of the stitch is 2.6 cm and the maximum width is 7 mm.

SEWING HEMS IN HEAVY FABRIC

When sewing over seams in extra heavy fabric or a blue jeans hem, the foot can tip as the machine climbs over the seam. Use the multipurpose tool to balance the height of the hem as you sew.

One side of the plate is thicker than the other. Use the side that suits the thickness of the seam best.
The blind hem creates an invisible hem on garments. There are two types of blind hem; one is recommended for medium to heavy woven fabric, the other for medium to heavy stretch fabric.

Fold the fabric as illustrated. Make sure the folded edge of the fabric follows the inside of the right “toe” of Blind Hem Foot D.

Lower the presser foot and step on the foot control.

The left swing of the needle should just catch the edge of the folded fabric.

If necessary, adjust the stitch width as needed to barely “catch” the fold.

Note: The blind hem technique is not recommended for light weight fabric.
SEWING BUTTONHOLES

The buttonholes in your sewing machine are specially adjusted for different kinds of fabric and garment. Look at the stitch table on the last pages in this book to find descriptions of each buttonhole.

Fabric should be interfaced and/or stabilized where buttonholes are to be sewn.

Buttonhole Slider Foot C

1. Make removable marks on fabric where you want the buttonholes to be placed.
2. Attach the buttonhole slider foot C and pull out the button holder plate. Insert the button. The button will determine the length of the buttonhole.
3. Make sure that the thread is passed through the hole in the presser foot and placed under the foot.
4. Select the buttonhole you want to sew and then adjust the stitch and length that you desire.

Note: Always sew a test buttonhole on a scrap piece of fabric.

5. Position the fabric under the presser foot so that the marking is aligned with the center of the buttonhole foot.
6. Lower the buttonhole lever, and push it away from you.
7. Hold the end of the upper thread and start sewing. The buttonholes are sewn from the front of the presser foot to the back.
8. Once the machine has sewn the buttonhole, raise the presser foot.
Corded Buttonhole (StretchFabrics)
When sewing buttonholes in stretch fabrics we recommend cording the buttonhole to increase the stability and to keep the buttonhole from stretching out.

1. Loop a piece of heavy thread or perle cotton over the finger at the back of the Buttonhole Slider Foot C.
2. Stitch a buttonhole. Do not hold back the cord. The satin buttonhole columns will stitch over the cord.
3. When the buttonhole is finished, lift the cord off the finger and pull out the slack.
4. Cross the cord in front of the needle and thread cord ends into a large needle, pull to the wrong side and knot ends before cutting excess.
5. Use the seam ripper to carefully open the buttonhole.

SEWING ON BUTTONS
Sew buttons, snaps, hook and eyes quickly with your sewing machine. Use the multipurpose tool to create a thread shank.

1. Select sew-on-button stitch 1:09.
2. Snap off the presser foot and lower the feed teeth.
3. Place the fabric, multipurpose tool and button under the ankle with the holes in the button lined up with the swing of the needle. Check the swing of the needle by turning the handwheel and making sure that the needle does not hit the button.

Note: The recommended width of 3.0 is set for most buttons. If you sew a tiny button or a very large coat button, decrease (−) or increase (+) the stitch width until the swing of the needle sews in the holes of the button or snap.

4. Press the foot control. The sewing machine will sew the button in place, make a fix and then stop.
5. Raise feed teeth and remove the fabric.

Note: Place the thin end of the clearance plate under the button when sewing on light fabrics. Use the thick end for heavier fabrics. Hold in place on the fabric with transparent tape.
SEWING ZIPPERS

The Zipper Foot E can be snapped on either to the right or to the left of the needle, making it easy to sew both sides of the zipper from the same direction. To sew the other side of the zipper, reposition the Zipper Foot.

Center Zipper

1. Sew the two fabrics right sides together along the 5/8” (15 mm) seam line, stopping at the notch for the zipper placement.

2. Baste the remaining seam where the zipper will be placed. Press the seam open. Place the zipper right side to the pressed open seam allowance, placing the zipper stop at the notch. Pin in the zipper on the right side so that it stays in place.

3. Select straight stitch and move the needle position to the left. Snap on the Zipper Foot E so the needle is on the left side of the foot. Place fabric under the foot right side up with the zipper foot on the right side of the zipper.

4. Begin stitching across the bottom, turn the fabric and stitch the right side of the zipper to the top.

5. To avoid fabric shifting, sew the left side of the zipper in the same direction. Snap on the Zipper Foot E so the needle is on the right side of the foot. Move the needle position to the right.

6. Begin stitching across the bottom, turn the fabric and stitch the left side of the zipper sewing from the bottom to the top.

7. Remove the basting stitches.

Note: To adjust the position of the stitching line, adjust the needle position.
GATHERING

⚠️ Turn off the main switch.

1. Snap on the gathering foot. Switch on the sewing machine.

2. If you are only using one piece of fabric, place it under the presser foot and sew a straight stitch. The fabric will gather.

3. If you are using two pieces of fabric place one piece under the presser foot and the other piece of fabric in between the cut in the foot (see picture).

4. Start sewing. The bottom layer of fabric will gather while the top layer stays flat.

DUAL FEED FOOT

The dual feed presser foot is designed to feed layers of fabric and/or batting evenly. Perfect for quilting, sewing velvet, some stretch fabrics, imitation leathers and fabrics which need careful pattern matching. It also helps to prevent uneven feeding of very difficult fabrics.

1. Remove the presser foot ankle by unscrewing the ankle screw.

2. Place the dual feed on your machine from the back, positioning the lever over the needle clamp screw (A). Then screw the dual feed onto the presser foot bar with the black screw found together with the dual feed foot (B).

3. Make sure both the needle screw (A) and the attaching screw (B) are tightly secured.

Reduce presser foot pressure to 3.

How to Attach the Guide

The two guides included with the dual feed will help you sew parallel rows of stitching side by side as in channel quilting or tucking. There is one guide for the left side, and one for the right.

- Place the guide into the slot on the back of the dual feed foot (C) and push it down.
- Adjust the space between the foot and the guide by pulling it to the left or to the right.
To keep your sewing machine operating well, clean it often. No lubrication (oiling) is needed.

⚠️ Turn off the main switch.

CLEANING
Wipe the exterior surfaces of your sewing machine with a soft cloth to remove any dust or lint built up.

CHANGING THE LIGHT BULB
Only use light bulbs of a type as indicated on the front of the machine (12V, 5W). They are available at your authorized HUSQVARNA VIKING® dealer.

⚠️ Turn off the main switch.

1. Place the light bulb remover with the deep hole, marked OUT, around the bulb. Do not turn the bulb, just pull it out to remove it.

2. When inserting a new light bulb place the remover with the shallow hole, marked IN, around the new bulb. Insert the new bulb by pushing it up.
CLEAN THE BOBBIN AREA

⚠️ Turn off the main switch

1. Remove the presser foot, the bobbin cover and bobbin.
2. Clean the feed teeth with the brush.

Cleaning Under the Bobbin Area

⚠️ Turn off the main switch

After sewing several projects or any time you notice an accumulation of lint in the bobbin case area, the area under the bobbin case must be cleaned.

1. Remove the needle, presser foot, bobbin cover and bobbin.
2. Remove stitch plate by removing the two screws in the stitchplate. Lift up the stitchplate.
3. Lift the bobbin case upwards and remove it.
4. Clean the area with the brush or with a dry cloth.
5. Put the bobbin case back into the hook race so that the tip fits into the stopper.
TROUBLE SHOOTING

Have your Sewing Machine Serviced Regularly by an Authorized HUSQVARNA VIKING® Dealer!

If you have followed the below trouble shooting information and still are having sewing problems, take the sewing machine to your authorized dealer. If there is a specific problem, it is a great help to test sew with your thread on a scrap of your sewing fabric and bring it to your dealer. A sewing sample will often give much better information than words.

Non-Original Parts and Accessories
The warranty does not cover any defect or damage caused by use of non-original accessories or parts.

Any Time You Experience a Problem When Sewing:
- Rethread the top and bobbin threads.
- Use different spool pin positions (vertical or horizontal).
- Use thread nets and quality thread. We recommend the same sewing thread on top and bobbin for general sewing. For decorative sewing we recommend embroidery thread on top and regular sewing thread on bobbin.

Fabric Puckers?
- Check needle, it could be damaged.
- Rethread top and bobbin threads.
- Change thread type to match fiber and sewing technique.
- Use quality thread
- Shorten stitch length
- Use stabilizer
- Check your thread tension

Skipped Stitches?
- Check needle - it could be damaged.
- Change needle to recommended size and type.
- Be sure the needle is inserted correctly and all the way into the clamp.
- Rethread top and bobbin threads.
- Use recommended presser foot.
- Turn machine off and on to reset.
- Consult your dealer for service.

Needle Breaks?
- Use care not to pull fabric when sewing.
- Insert new needle size and type as recommended.
- Insert needle correctly as described in the User's Guide (page 15).

Poor Tension?
- Rethread top and bobbin - use quality thread.
- Insert new needle size and type as recommended.
- Follow recommendations for thread tension.

Upper Thread Breaks?
- Does thread feed smoothly/ not catching?
- Use thread nets and quality thread. For special threads such as metallic etc please consult your Accessory User's Guide for special needle recommendations.
- Rethread top and bobbin threads - check for correct threading.
• Try different spool pin positions (horizontal or vertical).
• If stitch plate hole is damaged, replace stitch plate.
• Is the correct spool cap used in front of the thread?

Fabric Does Not Move?
• Feed teeth up.
• Increase stitch length.

Bobbin Thread Breaks?
• Wind a new bobbin.
• Replace the bobbin in the machine, check correct threading.
• If stitch plate hole is damaged - replace stitch plate.
• Clean bobbin area.

Bobbin Winds Irregularly?
• Check threading for bobbin winding.

Wrong Stitch, Irregular or Narrow Stitches?
• Turn machine off and on to reset.
• Change needle, rethread top and bobbin threads.
• Use stabilizer.

Machine Sews Slowly?
• Check speed
• Remove stitch plate and brush lint from bobbin and teeth area.
• Have the sewing machine serviced at your dealer.

Machine Will Not Sew?
• Put bobbin winder spindle up into sewing position.
• Check plugs are all the way into machine.
• Check wall plug and power to wall plug.

Main Motor Blocked
• Clear out threads in bobbin case area (see page 42).
• Remove stitch plate and clear out threads.
• Re-thread machine - top and bobbin.
We reserve the right to change the machine equipment and the assortment of accessories without prior notice, or make modifications to the performance or design. Such modifications, however, will always be to the benefit of the user and the product.

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Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance.

CE - Authorised Representative

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